TWO MINIMAL INTERVENTION PROGRAMS FOR WEIGHT LOSS IN HEART TRANSPLANT CANDIDATES

By

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To my loving family and friends as well as
the patients who participated in this study.

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Abstract of Dissertation Presented to the Graduate School
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TWO MINIMAL INTERVENTION PROGRAMS
FOR WEIGHT LOSS
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The purpose of this study was to evaluate the effectiveness of two minimal intervention programs for weight loss in heart transplant candidates using a randomized experimental design. Forty-three patients were randomly assigned to a bibliotherapy-only or a bibliotherapy plus telephone contact group. Body weight (lbs), body mass index (BMI), and pounds lost were the main dependent measures. Participants in both treatment groups lost weight by posttreatment, with patients in the telephone contact group losing more weight and returning more 3-day food diaries and self-monitoring postcards. Furthermore, significantly more patients in the telephone contact group lost weight as opposed to gained/remained the same weight compared to patients in the bibliotherapy-only group. Listing status and the number of self-monitoring postcards received were

significantly related to the number of pounds lost. Regarding the weight loss strategies tried, self-monitoring, calculating calorie and fat intake, and following a calorie goal were reportedly used daily. Issues pertaining to study attrition, statistical power, cost-effectiveness, and generalizability are discussed, and practical guidelines regarding the implementation of a minimal intervention program with other medical populations are outlined.

INTRODUCTION

Heart transplantation has become an effective therapeutic intervention for individuals with end-stage heart disease, offering a nearly seventy percent chance of five-year survival (UNOS, 1997). However, because of the limited availability of organs for transplant, individuals whose health status offers the best long-term prognosis are preferentially selected for the procedure. To aid the selection process, most medical centers have developed screening criteria for heart transplantation. Of the various biopsychosocial factors considered, obesity is among the contraindications for heart transplantation (Levenson & Olbrisch, 1993).

The health hazards of significant obesity are well documented and include increased risk of hypertension, coronary artery disease, cancer, and diabetes mellitus (Kissebah, Freedman, & Peiris, 1989). Body mass index (BMI; kg/m^2) has also been demonstrated to be a significant and independent predictor of mortality in healthy adults (Dorn, Schisterman, Winkelstein, & Trevisan, 1997) as well as the acutely ill (Galanos et al., 1997). For heart transplant candidates, overweight entails additional health risks. Obesity may compromise surgical interventions as well as complicate the post-operative course of heart transplant recipients. Notably, moderately to morbidly obese renal transplant patients have recently been found to incur significantly more wound infections and delayed graft function compared to their less obese counterparts (Drafts et al., 1997).

Furthermore, the obese patients tended to gain more post-surgical weight affecting the dosing of an essential post-transplant medication (Cyclosporin). In addition to potential post-surgical problems, poor dietary and exercise habits often indirectly associated with obesity may further jeopardize recovery post-transplantation (Grady, Costanzo-Nordin, Herold, Sriniavasan, & Pifarre, 1991; Winters et al., 1990).

In the past two decades, obesity rates have been increasing at an alarming rate in the United States as well as around the globe (Taubes, 1998; Flegal, Carroll, & Kuczmarski, 1998). Considering the substantial health and mortality consequences of obesity, experts have recently recommended weight loss for people with BMIs greater than twenty five (Wickelgren, 1998). Locally, overweight has been considered a clinically significant problem for a number of patients considered for heart transplantation at Shands Hospital. However, there are presently no systematic programs in operation to assist heart transplant candidates who are instructed to lose weight. Since obesity is a modifiable risk factor, this problem may be effectively addressed through the implementation of a weight loss program. However, since a significant proportion of the heart transplant candidates receiving care at Shands Hospital live notable distances from the health center, a weekly, therapist-directed group intervention program did not seem appropriate. Rather, a minimal intervention program seemed most feasible for this population. Since minimal intervention programs have been found to be cost-effective alternatives to standard behavioral treatments which can improve dietary knowledge as well as promote weight loss (Black, Coe, Friesen, & Wurzmann, 1984; Black & Threlfall, 1986; Lasater et al., 1991; Miller, Eggert, Wallace, Lindeman, & Jastremski, 1993), the

development and implementation of a minimal intervention program for overweight heart transplant candidates was the central aim of this project. Additionally, the assessment of the relative effectiveness of a bibliotherapy-only (information) versus a bibliotherapy plus telephone contact program (information plus twelve therapy sessions via telephone) and of factors related to program adherence (i.e., return rates of 3-day food diaries and self-monitoring postcards) were primary objectives of this study.

REVIEW OF LITERATURE

Behavioral Weight Loss Programs

Since the 1970s, behavioral interventions have become the most frequently implemented strategies for weight loss. Behavioral techniques typically involve the use of operant principles to assist people in altering environmental stimuli that elicit and maintain eating behavior (Stuart, 1967). For example, individuals are taught to monitor when they eat, to substitute high calorie foods with low calorie food choices, and to eat at standard times during the day. Empirical support for standard short and long-term programs is strong and the beneficial effects of weight loss on hypertension, glucose tolerance, hyperlipidemia and psychological adjustment are well documented (Jeffery et al., 1993; Perri, McAllister, Gange, Jordan, McAdoo, & Nezu, 1988; Wadden & Stunkard, 1985; Wing et al., 1987). Unfortunately, researchers continue to grapple with an "optimal" formulae for lasting weight loss (DeLucia & Kalodner, 1990; Foreyt, 1987; Perri, Nezu, Patti, & McCann, 1989).

Because standard behavioral programs can be expensive, time consuming, and intrusive, it is not surprising that minimal intervention programs have evolved (Black, Coe, Friesen, & Wurzman, 1984). In general, degree of therapist contact distinguishes the various minimal intervention approaches. The simplest minimal intervention approach involves no direct therapist contact and participants use a self-administered behavior

therapy manual to assist weight loss (i.e., bibliotherapy without therapist contact program). A slightly more sophisticated minimal intervention approach involves limited patient-therapist contact, with participants relying primarily on a self-administered behavior therapy manual (i.e., bibliotherapy with minimal therapist contact). A third minimal intervention approach combines bibliotherapy with routine contact between patients and behavior therapists by phone or mail (i.e., bibliotherapy with therapist contact).

The general effectiveness of minimal intervention programs has been repeatedly demonstrated in community and clinic populations (Beresford et al., 1992; Marston, Marston, & Ross, 1977; Pezzot-Pearce, LeBow, & Pearce, 1982). In a series of studies, Black et al. (1984) compared the effectiveness of minimal intervention programs to standard short and long-term behavioral therapy programs. In the first of two empirical investigations, one minimal intervention program for weight loss was compared to three shortened behavioral programs. The minimal intervention consisted of three weigh-ins (pretreatment, 6 and 10 weeks), and participants were given brief weight loss guidelines ("eat a nutritious and well balanced diet, find ways to increase physical activity, and lose weight slowly"). Participants paid a $35.00 deposit which served as an incentive/reward for study participation. The total deposit was refunded after treatment completion. All participants assigned to the shortened behavioral program condition met once a week for sixty to ninety minutes for six consecutive weeks, once following the completion of treatment, and at a seven month follow-up session. Participants assigned to a basic shortened program were trained in self-monitoring, nutrition, and exercise, and also

received information about the benefits of social support. Participants in the second shortened behavioral program learned the basic program plus stimulus control techniques, and participants in the third shortened program were taught the basic program plus cognitive restructuring. Results showed that all treatment participants lost a comparable amount of weight by the end of treatment as well as by the follow-up assessment (approximate eight pound weight loss), thereby demonstrating the relative effectiveness of a minimal intervention for weight loss. These results also proved that weight loss could be achieved with minimal counselor assistance, and with only a few simple verbal instructions.

In the second study by Black et al. (1984), the effectiveness of a minimal intervention approach was compared with two full length behavior therapy programs. Participants in the minimal intervention group were given the same brief guidelines for weight loss as in study 1, and they were seen only at a weigh-in and at a six-month follow-up meeting. However, minimal intervention participants in study 2 did not pay a deposit. The two full-length programs differed only with respect to the motivational aspects of treatment; participants in a 'group-reliance' condition were told to support and encourage each other, while participants in a 'self-reliance' condition were instructed to rely less on other group members for support. All participants in the full-length behavioral programs met once a week for ninety minutes for ten consecutive weeks and at a six-month follow-up meeting. It was found that participants in both full length programs lost significantly more weight by posttreatment (approximately four pound weight loss for the minimal intervention group versus approximately ten pounds for the full length groups). However,

by the time of the six-month follow-up, participants in the minimal and full length intervention did not differ in the amount of weight lost (average weight loss = 8 pounds). These findings suggest that minimal intervention participants lost less weight initially, but did just as well as participants in the full length behavioral programs by the time of the six month follow-up.

Research has suggested that incentives may be worthwhile adjuncts to minimal intervention programs. In a ten-week minimal intervention study by Lasater et al. (1991), participants (n = 129) paid monetary deposits at the time of weigh-in, received monetary incentives at the weigh-out (cash back), as well as free cholesterol screening tests. Treatment included information about weight loss, exercise, calorie goals, cholesterol, sodium, and health. Results showed significant weight losses for study participants comparable to weight losses for standard behavioral programs (approximately eight pounds lost over ten weeks). In addition, a significant number of participants described the incentive conditions as helpful, suggesting that monetary and nonmonetary incentives may promote weight loss. Unfortunately, the absence of a non-incentive control group precluded an investigation of the added value of incentives for a minimal intervention approach. Also, the effectiveness of monetary versus nonmonetary incentives was not clarified, with the relative usefulness of cash-back incentives versus cholesterol screening tests for weight loss unclear.

Work by Black and Friesen (1983) has also found cash-back incentives to be associated with enhanced weight loss for participants in minimal intervention programs. These researchers compared a minimal intervention deposit/cash-back group to a minimal

intervention no-deposit group. Participants in the deposit condition paid $25.00 before treatment, received $15.00 back after the start of treatment, and then $10.00 back for attendance at one and four month meetings. It was found that participants in the deposit/cash-back group attended more meetings and lost significantly more weight than non-deposit participants. While the reasons for superior weight losses in the deposit/cash-back group are unclear, motivation to lose weight may improve when participants expect monetary benefits for weight loss efforts. Another possible explanation is that the perceived value of services received may increase when participants are required to pay a deposit for program participation. On the other hand, the deposit/cash-back effect may be simply an artifact of extra-experimental factors (e.g., socioeconomic status) and/or differential readiness for weight loss. Regardless, findings from these studies suggest that refunded monetary deposits may be a valuable component of minimal intervention weight loss programs.

However, a recent study by Jeffery et al. (1993) did not support the efficacy of monetary incentives for weight loss. In this study, approximately two hundred men and women were randomly assigned to five treatment groups: no treatment, standard behavioral treatment (SBT), SBT plus food provision, SBT plus incentives, or SBT plus food provision and incentives. Change in weight was assessed at 6, 12, and 18 months. For the food provision condition, participants were given prepackaged meals for five breakfasts and five dinners each week. For the incentive conditions, participants received a cash payment ($2.50 - $25.00 monetary reward) each week based upon the amount of weight they had lost in relation to their weight loss goal. It was found that participants

who were provided food lost substantially more weight at each evaluation point than those who received SBT with or without monetary incentives. Incentives were found to have no effect on weight when used alone or with other strategies; an outcome contradicting previous research findings. One possible explanation for the conflicting findings may be that deposit/cash back incentive procedures operate through different mechanisms than monetary reward procedures. It is possible that one's own money may have greater incentive value than external rewards of a similar magnitude. On the other hand, the relatively small monetary incentives used by Jeffery et al. (1993) may not have been sufficient to aid weight loss. In light of the mixed findings regarding the usefulness of incentives for weight loss, additional research is needed to clarify the mechanisms by which incentives may have an effect on weight loss.

While the inclusion of incentives in weight loss is debatable, Black and Threlfall's (1986) assessment of a two-step minimal intervention program clearly supports the inclusion of bibliotherapy in minimal contact weight reduction programs. In this study, thirty-five participants initially were given brief guidelines about losing weight safely as well as instruction in self-monitoring and calorie counting (Step 1). However, in the event that weight records showed no progress for three consecutive weeks, participants then received bibliotherapy problem solving packets in the mail approximately once a week for ten weeks. Packets included reading materials, self-monitoring forms, and quizzes (Step 2). Participants were followed for one year and assessed at a three-month follow-up session. Weight losses were found at both the verbal instruction-only step (Step 1) and the bibliotherapy/problem solving step (Step 2). Significant weight losses for all

participants in the first step of the program (14 pound average weight loss) supports the validity of a weight loss program that is primarily self-administered. However, that Step 2 was needed by twenty two of the twenty six participants suggests that verbal instructions for weight loss alone are insufficient. In fact, the effectiveness of the bibliotherapy/problem solving step (21 pound average weight loss) strongly supports the inclusion of bibliotherapy in minimal intervention programs. While these results are promising, findings must be interpreted cautiously because participants who successfully lost weight in the second step of the program were heavier at pretreatment as well as significantly younger in age.

While it has been well documented that individuals can lose weight by participating in minimal intervention programs, Miller, Eggert, Wallace, Lindeman and Jastremski (1993) has documented that participation in a minimal intervention program may also help overweight individuals alter dietary and exercise habits. In this study, thirty-five men and women with more than 25% body fat as determined by hydrostatic weighing were given a workbook emphasizing self-monitoring of diet and exercise, and they were requested to return behavioral monitoring sheets once a month for six months. Nine obese men and women who did not receive a workbook served as control participants. Analysis showed that participants in the treatment group lost approximately fifteen pounds while control group participants showed no change in body weight. Also, participants in the intervention group significantly decreased fat intake, significantly increased carbohydrate and protein intake, and spent more time exercising per week. In contrast, the control group participants showed no changes in diet or exercise patterns. These findings are

encouraging and suggest that overweight individuals can lose weight as well as change eating and exercise behaviors through participation in minimal intervention programs for weight loss.

Weight Loss in Medical Patients

Studies from the weight loss literature suggest that minimal intervention programs can help healthy people lose weight, but the effectiveness of minimal intervention programs for individuals with major medical illness has received very little empirical study. In one of the few studies in this area, Martin et al. (1995) found that severely obese patients were able to lose weight by participating in a minimal contact weight loss program. In this study, seventy patients scheduled for gastric bypass surgery agreed to diet preoperatively by consuming a very low calorie diet (420 Kcal, 70 gram liquid diet) for at least one month. In addition, study participants received information about problem solving, nutrition, stimulus control, self-monitoring, and exercise. Participants lost an average of sixteen pounds, with patients who lost weight showing no evidence of increased wound healing problems. Thus for this population, it appeared that presurgical weight loss could be safely accomplished via involvement in a minimal intervention program. However, given that the study sample was limited to morbidly obese patients and that participants followed a very low calorie diet, results may not be applicable to mildly or moderately obese individuals or programs involving less restrictive, daily caloric intakes. Also, these results reveal little about the effectiveness of minimal intervention programs for individuals with major medical illnesses. Nevertheless, the results do suggest that obese patients can lose weight pre-surgically with minimal contact with health

professionals, and potentially without significantly increasing post-operative wound healing problems.

Research suggests that obesity is a serious health threat that can be effectively treated with minimal weight loss intervention programs. In general, weight losses of approximately eight pounds have been found for minimal intervention programs offering brief weight loss guidelines, bibliotherapy, and incentives. However, study findings must be qualified for several reasons. First, the issue of generalizability is concerning given that study samples have included more women. Second, the strategies associated with significant weight loss remain unclear due to the lack of assessment of the relative effectiveness of different facets of treatment. Finally, because research is sorely lacking with medical patients, the usefulness of minimal intervention programs for weight loss in individuals with major medical illness is essentially unknown.

Despite the limitations of the research to date, a primary strength of minimal intervention approaches is their ability to help individuals lose weight and to potentially adopt healthier dietary/exercise habits with limited contact from health professionals. Another advantage of minimal intervention programs is that they can be utilized when more elaborate interventions are not feasible (e.g., individuals who have difficulty traveling to distant treatment facilities). In addition, minimal intervention programs can be useful in reaching more individuals without significant cost to providers or recipients.

The value of therapist contact in weight loss programs has been documented in several studies assessing post treatment programs designed to enhance weight loss maintenance. In a series of studies assessing the usefulness of continued therapist contact

for long-term weight loss, participants in therapist contact groups were found to have significantly better weight loss progress than participants in no-contact conditions (Perri et al., 1987; Perri, McAdoo, Spevak, & Newlin, 1984; Perri, McAdoo, McAllister, Lauer, & Yancey, 1986). While these findings specifically address the use of client-therapist contact following behavioral treatments, such results generally suggest the value of routine therapist contact for weight management. Routine therapist contact affords several additional empirical benefits: (a) information provided in self-administered behavior therapy manuals can be clarified and/or elaborated by phone or mail, (b) satisfaction with the program can be assessed over time, (c) weight loss techniques that are tried and utilized over the course of treatment can be documented, and (d) patients' health status can be monitored.

Heart Transplantation

There are approximately 500,000 deaths annually from heart disease and another 1,250,000 people have nonfatal heart attacks each year (USDHHS, 1992). Fortunately, heart transplantation has become a feasible treatment option potentially improving the quality as well as length of life of individuals with end-stage heart disease (Kriett & Kaye, 1990).

Heart transplants were first performed in the late 1960s, and since that time the number of recipients of new hearts has risen dramatically. Presently, there are over two hundred transplantation programs around the world and thousands of heart transplants are performed each year. Along with the increases in the number of heart transplants performed are medical advances that have led to improvements in actuarial survival.

Today, overall survival rates one and five years post-transplantation are approximately eighty five and seventy percent, respectively (UNOS, 1997).

While advances in transplantation biology have led to marked improvements in survival rates post-transplantation, the present shortage of donor organs has led to the rationing of transplants. Committees/transplant teams have been established to evaluate and select individuals for organ transplantation (Surman & Purtilo, 1992). Evaluation of organ transplant candidates is quite comprehensive involving the review of relevant medical, social, psychological, lifestyle, and behavioral contraindications to organ transplantation by multi-disciplinary teams of nonpsychiatric medical doctors, psychiatrists, psychologists, and/or social workers (Kay & Bienenfeld, 1991; Levenson & Olbrisch, 1993). While some evaluation criteria are explicit (e.g., irreversible hepatic or renal function, active systemic infection, alcohol and/or drug abuse which may interfere with medical compliance, schizophrenia), the relative importance of various lifestyle and psychosocial recipient characteristics is equivocal.

However, one risk factor that is increasingly considered in the evaluation of heart transplant candidates is obesity (Corley & Sneed, 1994). Significant overweight was reported to be an *absolute* contraindication to heart transplantation by 25% of 122 active cardiac transplant programs surveyed in 1989 (Levenson & Olbrisch, 1993). Furthermore, 59% of the programs surveyed in 1989 reported significant overweight as a *relative* contraindication for the procedure.

Obesity is relevant to heart transplantation because it is associated with several post-transplant complications including hypertension, diabetes, and cardiovascular disease

(NIH, 1985). Hyperlipidemia which often accompanies obesity is a major post-operative risk factor because it is a known risk factor for coronary artery disease (Grady et al., 1991). Significantly elevated serum total cholesterol and triglyceride levels have been found for heart transplant recipients with body mass indexes greater than 25 kg/m^2 (Rudas et al., 1990). Furthermore, high cholesterol levels posttransplantation may be an early indicator of accelerated coronary artery disease and early graft failure. In a study assessing the predictors of accelerated coronary artery disease in heart transplant candidates, hypercholesterolemia measured six months following heart transplant was a strong predictor of coronary artery disease by the third year posttransplantation (Eich et al., 1991). Although observed hyperlipidemia following transplantation may be due to a variety of factors (e.g., Prednisone and Cyclosporin), obesity is considered one of the most important risk factors (Miller, 1991).

Research into methods of preventing, detecting, and treating posttransplantation complications such as rejection and infection has also implicated obesity in life-threatening cardiac allograft vasculopathy (CAV), an atypical form of coronary artery disease that affects both arteries and veins of the allograft as rapidly as a few weeks after transplantation (Pfeifer & Collins, 1994). The formation of lesions and diffuse narrowing of the coronary artery are the primary pathophysiological processes associated with CAV. The pathogenesis of CAV is insidious and the consequences include the deterioration of the allograft and the possible onset of heart failure or sudden death (Pfeifer & Collins, 1994). Winters et al. (1990) found body mass index to be the most predictive risk factor for the development of coronary arteriopathy in human heart allografts following

transplantation. In addition, it was found that luminal narrowing was progressive over time and the impact of total cholesterol and triglycerides were additive. Presently, CAV is not reversible and cannot be prevented, and approximately fifty percent of patients are affected by the fifth year after transplantation (Gao et al., 1990).

In addition to body weight and cholesterol levels, weight history has important implications for heart transplant candidates. Lake, Reutzel, Pritzker, Jorgensen, and Emery (1993) found that among age, gender, preoperative diagnosis, history of hyperlipidemia, and diabetes, history of obesity was the only variable that was predictive of weight gain following transplantation. This finding is important and suggests that premorbid weight and associated dietary and exercise habits may be directly related with post-transplantation weight (and weight gain) and indirectly with several life threatening posttransplantation risk factors.

There is general agreement that patient selection criteria are important for the allocation of a limited supply of donor organs. Patients are evaluated on a variety of pertinent biological, psychological and social variables, one of which is body weight. Many transplant centers consider significant overweight a contraindication for cardiac transplantation. Empirical findings suggest that obesity may pose serious post-transplantation health risks that can increase morbidity and mortality. Moreover, long-term obesity and poor dietary and exercise habits associated with obesity may place overweight heart transplant patients at increased risk for complications following the procedure. However, because overweight is a modifiable risk factor, obese heart

transplant candidates who lose weight may improve their chances for selection for heart transplantation as well as their transplantation outcome.

Heart Transplant Research at the University of Florida

Heart transplant candidates have been routinely assessed since the inception of the transplantation program at Shands Hospital in 1985. There have been several empirical studies of heart transplant patients by staff psychologists and graduate students in the Department of Clinical and Health Psychology at the University of Florida Health Science Center. Within the past five years, use of Minnesota Multiphasic Personality Inventory (MMPI) profiles in the assessment of heart transplant candidates has been empirically validated, and the long-term cognitive functioning and affective adjustment of heart transplant recipients has been evaluated (Greene, Sears, & Mills, 1993; Hecker, Norvell, & Hills, 1989; Robinson, Greene, & Geisser, 1993).

Given the improved survival rates of patients with end-stage heart disease with heart transplantation, issues related to lifestyle patterns have assumed greater importance in research conducted at the University of Florida. In light of the significance of weight for patients who are considered for heart transplantation, assessment of the effectiveness of a structured weight loss program for overweight transplant candidates seemed a highly worthy research endeavor. From a scientific standpoint, the development, implementation, and evaluation of minimal intervention programs for heart transplant candidates would expand knowledge regarding the effectiveness of minimal intervention programs in a population with serious medical illness. Furthermore, such a project would make a valuable contribution to the weight loss literature.

While it is acknowledged that heart transplant candidates' participation in a weight loss program may be hindered by functional limitations and psychological distress, and that fluid retention may make the assessment of weight loss difficult, there are several potential benefits of implementing a minimal intervention weight loss program for overweight heart transplant candidates (Muirhead et al., 1992). First, a minimal intervention program can be a cost-effective weight loss approach that can obviate the need for long-distance trips to Shands Hospital for standard weight loss treatment. Another strength of a minimal intervention program is its potential to improve the quality of life of heart transplant candidates. Furthermore, making lifestyle changes, such as dietary or exercise habits prior to surgery may assist adjustment to new postoperative routines. Given that coronary artery disease is commonly associated with poor exercise and eating habits, a behavioral weight loss program may be particularly valuable for heart transplant candidates with advanced coronary artery disease. Finally, a minimal intervention for weight loss may help improve heart transplant patients' expectations and mood (Stunkard & Wadden, 1992). The importance of positive expectations in cardiac transplant patients has been recently documented by Leedham, Meyerowitz, Muirhead, and Frist (1995). These researchers found that positive expectations pre-transplantation were associated with positive mood, adjustment to illness, and ratings of quality of life post-transplantation, even for individuals who experienced health difficulties. Also, high pre-operative expectations predicted level of adherence to post-transplantation medical regimens. Thus, involvement in a weight loss intervention program may help promote heart transplant candidates' positive expectations which may then positively affect psychological adjustment and levels of adherence to complex medical regimens post-transplantation.

In light of the potential clinical, practical, and empirical gains associated with the implementation of a weight loss program for individuals with major medical illness, the central aim of the present study was to develop and implement a minimal intervention weight loss program for the heart transplant candidates being treated at Shands Hospital. Additional study aims were to compare the effectiveness of two types of minimal intervention programs: a bibliotherapy-only program and a bibliotherapy plus telephone contact minimal intervention program for weight loss, and to assess factors associated with program adherence (i.e., return rates of 3-food diaries and self-monitoring postcards)

Based upon prior research, it is expected that participants in the bibliotherapy-only and bibliotherapy plus telephone contact groups will lose a significant amount of weight by the time of a three-month posttreatment assessment, that participants in the bibliotherapy plus telephone contact group will lose significantly more weight compared to individuals in the bibliotherapy-only group, and that compared to participants in the bibliotherapy-only group, participants in the bibliotherapy plus telephone contact group are expected to show greater program adherence as assessed by the return rates of the 3-day food diaries and self-monitoring postcards

METHOD

Participants

Heart transplant candidates recommended for weight loss by their cardiologist at the University of Florida/Shands Hospital were referred for this study. Candidates meeting the following screening criteria were contacted to request their participation: (a) male or female heart transplant candidate who was instructed to lose weight by their physician, (b) body mass index (BMI) over 25 kg/m^2, (c) willing to commit to a six month treatment program, (d) not currently involved in other weight control programs, and (e) a seventh grade reading level.

Procedures

Patients verbally consenting to participate were seen immediately in the outpatient Cardiology Clinic or scheduled for a pretreatment assessment to coincide with the timing of their next medical appointment. At the pretreatment assessment, all participants read and signed a written consent form approved by the University of Florida Institutional Review Board. After height and weight measures were obtained, patients received coaching in self-monitoring, calorie and fat intake, and the Food Guide Pyramid. In addition, time was used to briefly review the contents of a twenty-five page bibliotherapy manual detailing cognitive and behavioral weight loss strategies (Appendix A).

Participants then learned how to complete a 3-day food diary (Appendix B). The days coded by participants for the 3-day food diary was standardized to include two weekdays (Monday and Wednesday) and Saturday. Participants were asked to return the 3-day food diary along with a Food Diary Accuracy Rating Form (0 = 'not at all accurate,' 1 = 'slightly accurate,' 2 = 'moderately accurate,' 3 = 'very accurate,' 4 = 'extremely accurate') in a prestamped/addressed envelop within one week of the pretreatment assessment. At the time of post-treatment (3 month) and follow-up (6 month) assessments, participants were asked to complete another 3-day food diary and Food Diary Accuracy Rating Form. Participants were also asked to complete a checklist outlining potential weight loss strategies tried during treatment (Appendix C).

To protect the confidentiality of the heart transplant candidates receiving treatment at Shands Hospital and to guard against differential treatment, all physicians and medical personnel were blind to the status of patients' study involvement. Thus, physicians and medical personnel had neither knowledge of who conceded or declined to participate in the study, nor were they given feedback about any participants' weight loss progress.

Treatment Groups

At the time of the pretreatment assessment, all participants were randomly assigned to one of two experimental groups: a bibliotherapy-only group or a bibliotherapy plus telephone contact group. The two groups were equated in treatment rationales and expectancies, format of the treatment manuals, amount of self-help homework, and levels of task difficulty. For ethical reasons, a nontreatment/control group was not included in this study.

Bibliotherapy-Only Group (BO). Participants in the BO group were instructed to neither enroll in any other weight loss programs nor contact another professional regarding weight loss. At the time of the pretreatment assessment, participants were assigned a calorie goal (1500 calories/day for men, 1200 calories/day for women). Participants were given a twelve week supply of self-monitoring sheets and they were instructed to record their calorie and fat intake daily (Appendix D). Patients were also coached on the Food Guide Pyramid and they were given self-monitoring forms containing recommended daily food servings by food group (i.e., bread/grain, vegetable, fruit, milk/dairy, meat, and fats/oils) based upon a 1200 or 1500 calorie diet. Only patients given medical clearance by their cardiologist were encouraged to develop a personalized activity plan (e.g., walking). All patients were encouraged to set reasonable weekly goals for weight loss.

Additionally, participants received a bibliotherapy manual. The manual contained twenty brief lessons as well as self-help quizzes. Topics addressed included self-monitoring, stimulus control, problem solving, reinforcement, and positive thinking. Participants were free to adopt strategies which best suited their interests, needs, and lifestyles.

Bibliotherapy plus Telephone Contact Group (TC). All procedures for the TC group were identical to the BO group. Additionally, patients in the TC group were assigned an individual weight loss therapist for twelve, weekly telephone sessions. Three female graduate students in the Department of Clinical and Health Psychology at the University of Florida Health Science Center, trained in the study procedures by the principal investigator, served as the individual therapists. Approximately six months before the

onset of the study, the therapists received the bibliotherapy manual as well as a structured, standardized therapy guide which included session-by-session treatment procedures (Appendix E). In working with the patients, therapists were instructed to set a routine therapy time during which the contents of the bibliotherapy manuals were reviewed. Therapists documented weight loss strategies tried, reviewed calorie and fat gram goals, and assisted patients with problem solving.

A registered dietitian served as dietary consultant on an "as needed basis" throughout the study. A graduate student in the Department of Food Science and Human Nutrition, supervised by the dietician, completed the pretreatment, 3-day food diary analyses. In addition, participants received one ticket for each completed self-monitoring postcard received for a chance to win a $100.00 raffle held at the time of study completion.

Dependent Measures

Weight. Three weight loss indices were used in the data analyses: body weight in pounds, body mass index (BMI; weight/height^2), and pounds lost. Due to error associated with measurement, it has been suggested that multi-operationalizing constructs can provide a more valid assessment of treatment effects (Cole, Howard, & Maxwell, 1981).

Three Day Food Diary. Participants were asked to return detailed, 3-day food diaries one week following the pretreatment, posttreatment, and follow up assessments.

Self-Monitoring Postcards. Patients were instructed to return calorie and fat intake information on prestamped/addressed postcards weekly to the Psychology Clinic in Shands for the duration of the study.

Analyses

Weight was assessed at baseline, posttreatment (3 months), and follow-up (6 months). Measures of program adherence (i.e., 3-day food diaries and self-monitoring postcards) were collected in between assessments (Pre to Post; Post to Follow up).

A multivariate analysis of variance (MANOVA) was used to assess for pretreatment group differences in body weight and BMI for treatment participants and nonparticipants. Treatment drop-outs and participants were compared on pretreatment sociodemographic (age, gender, race, education, income, marital status, religion, work status, distance from Shands Hospital) and medical variables (diabetes, diagnosis, family history of heart disease, percent taking Lasix and psychotropics, listing status, New York Heart Association class [NYHA], smoking history [PPD]) using independent sample t-tests and chi-square (X^2) analyses.

Pretreatment 3-day food diaries were assessed using the Nutritionist IV (Version 2.0; 1992). Multivariate analyses of variance (MANOVAs), paired and independent sample t-tests, as well as chi-square analyses were used to assess group differences in body weight, BMI, pounds lost, macro and micro nutrient intake levels, and number of food diaries/postcards returned by Enrollees (patients who entered the study) and Completers (patients who remained in the program until the posttreatment assessment). Spearman Rho and Pearson correlation coefficients were used to assess the relationship between pounds lost, listing status, and amount of therapy contact.

RESULTS

Sociodemographic characteristics are presented in Table 1. Fifty four patients were referred for study participation. Of the patients who agreed to participate ($n = 43$), 74% were male (15 males, 7 females in BO group and 17 males, 4 females in TC group), 86% were Caucasian (9.3% African American, 2.3% Asian, 2.3% Hispanic), and 79% were married (11.6% divorced, 4.7% separated, 2.3% single). Average age was 47.9 years (SD = 8.9 yrs), and 88 percent had more than twelve years of education. Approximately 90% of patients were not working at the time of the study.

Eleven patients declined to participate. Nonparticipants had relatively lower average pretreatment body weight/BMI compared to participants (mean = 207.2; SD = 43.7) and were older (mean = 54.9, SD = 6.9); however, these differences were not statistically significant; $F(2, 51) = .54$, $p > .05$ for body weight; $F(2, 51) = 2.74$, $p > .05$ for BMI; $F(2, 50) = 2.66$, $p > .05$ for age. The only statistically significant difference between participants and nonparticipants was that nonparticipants lived significantly farther from Shands Hospital compared to patients in both treatment groups; $F(2, 49) = 3.32$, $p < .05$ (Table 1).

Medical variables are presented in Table 2. All patients had been previously diagnosed with one of four types of cardiomyopathy (idiopathic, ischemic, dilated, and nonischemic), with 81% taking Lasix as part of the medical management of their heart disease. Average New York Heart Association (NYHA) classification was approximately

Table 1

Sociodemographic Characteristics by Group

	Group		
	BO (N=22)	TC (N=21)	NP (N=11)
Age			
M	48.1	47.8	54.9
SD	9.4	8.5	6.9
Gender			
Male	68% (15)	81% (17)	90.9% (10)
Female	32% (7)	19% (4)	9.1% (1)
Race			
Caucasian	90.0% (20)	81% (17)	91.0% (10)
African American	4.5% (1)	14.2% (3)	9.0% (1)
Hispanic	4.5% (1)	0.0% (0)	0.0% (0)
Asian	0.0% (0)	4.8% (1)	0.0% (0)

Continued

Table 1--continued

	Group		
	BO (N=22)	TC (N=21)	NP (N=11)
Education			
≤High School	14.0% (3)	9.5% (2)	NA
>High School	86.0% (19)	90.5% (19)	NA
Income			
M	28,466	41,357	NA
SD	23,313	41,207	NA
Marital			
Married	72.7% (16)	85.6% (18)	NA
Divorced	18.3% (4)	4.8% (1)	NA
Separated	4.5% (1)	4.8% (1)	NA
Single	4.5% (1)	4.8% (1)	NA
Religion			
Baptist	22.7% (5)	38.1% (8)	NA
Catholic	27.3% (6)	14.3% (3)	NA

Continued

Table 1--continued

	Group		
	BO (N=22)	TC (N=21)	NP (N=11)
Religion			
Protestant	27.3% (6)	9.5% (2)	NA
Lutheran	0.0% (0)	4.8% (1)	NA
Other	22.7% (5)	33.3% (7)	NA
Working	9.1% (2)	23.8% (5)	18.2 (2)
Miles to Shands			
M	89.6_a	136.8_b	150.7_b
SD	62.4	82.8	72.9

Note: n listed in parentheses. NP = nonparticipant; NA = data not available. Dissimilar subscripts indicate significant differences across groups.

Table 2

Medical Characteristics by Group

	Group		
	BO (N=22)	TC (N=21)	NP (N=11)
Lasix	90.9% (20)	71.4% (15)	76.9% (10)
Psychotropics	13.6% (3)	14.3% (3)	27.3% (3)
Listed	36.5% (8)	33.3% (7)	NA
NYHA Class			
M	2.47	2.42	2.43
SD	.85	.57	.73
Diagnosis			
Idiopathic CM	31.8% (7)	28.6% (6)	0.0% (0)
Ischemic CM	36.4% (8)	47.6% (10)	54.5% (6)
Dilated CM	22.7% (5)	19.0 % (4)	27.2% (3)
Nonischemic CM	9.1% (2)	4.8% (1)	18.3% (2)
Family hx heart disease	59.1% (13)	38.1% (8)	63.6% (7)
Diabetes	22.7% (5)	14.3% (3)	15.4% (2)

Continued

Table 2--continued.

	Group		
	BO (N=22)	TC (N=21)	NP (N=11)
Packs per day			
M	1.5 (11)	.95 (10)	.97 (9)
SD	.62	.99	.54

Note: n in parentheses. Listed = Listed for heart transplantation. NYHA = New York Heart Association Class (I-IV). NP = nonparticipant; CM = cardiomyopathy.

'2.5' indicating that patients were experiencing symptoms (e.g., fatigue, exertional dyspnea, shortness of breath) which were moderately to dramatically limiting activities. Nearly 50% had a family history of heart disease. Five patients in the BO group and three in the TC group had diagnosed diabetes mellitus. Three patients in each treatment group had been previously prescribed one of the following psychotropic medications: Ativan, Lorazepam, Prozac, Valium, Xanax, or Zoloft. Approximately 30% of participants (eight in the BO group; seven in the TC group) were listed subsequent to their study referral and prior to the posttreatment assessment. A notable proportion previously smoked (14/21 in the TC group and 14/22 in the BO group) between 1.0 - 1.5 packs of cigarettes per day.

Of the 43 patients who entered treatment, 14 verbally withdrew (i.e., dropped-out) from the TC group before the posttreatment assessment representing an overall attrition rate of 32%. Notably, eleven patients in the BO group who did not attend the three month follow up were not considered drop-outs in this analysis since the study design precluded an assessment of their level of program involvement during the treatment phase. Drops-outs did not differ from Completers in pretreatment body weight, BMI or any sociodemographic and medical variables except smoking history ($ps > .15$). A t-test showed that Completers had previously smoked more packs of cigarettes per day (mean = 1.5, SD = .80) compared to drop-outs (.58, SD = .61); $t(18) = 2.48$; $p < .05$.

For most drop-outs, missing posttreatment weights were obtained within thirty days of the scheduled posttreatment assessment from medical records. However, there were no data available for seven patients (four in the TC group, three in the BO group), and pretreatment weights were substituted for missing posttreatment weights. Drop-outs

Table 3

Average Percent of RDAs by Group for Enrollees

	Group		
	BO (n = 13)	TC (n = 16)	Combined (n = 29)
Kilocalories	71.1 (24.1)	72.3 (25.9)	71.7 (24.6)
Macro nutrients			
Protein	143.2 (42.5)	117.3 (48.0)	128.9 (46.7)
Carbohydrate	73.9 (24.8)	75.8 (25.4)	74.9 (24.7)
Fat	69.7 (38.9)	73.8 (42.8)	72.0 (40.5)
Saturated fat	63.3 (45.3)	70.2 (51.4)	67.1 (48.0)
Mono fat	81.7 (47.7)	91.5 (56.5)	87.1 (52,0)
Poly fat	40.5 (25.1)	39.4 (27.1)	39.8 (25.8)
Micro nutrients - Vitamins			
Vitamin A	128.2 (94.2)	152.3 (159.3)	141.5 (132.5)
Thiamin (B1)	152.0 (102.5)	110.4 (39.7)	129.1 (76.1)
Riboflavin (B2)	132.8 (86.4)	111.8 (40.8)	121.2 (64.8)
Niacin (B3)	153.4 (55.9)	140.8 (54.5)	146.4 (54.5)

Continued

Table 3--continued

	Group		
	BO (n = 13)	TC (n = 16)	Combined (n = 29)
Micro nutrients - Vitamins			
Vitamin B6	91.1 (26.0)	86.3 (33.9)	88.4 (30.2)
Folate	116.3 (49.7)	116.8 (50.4)	116.6 (49.2)
Vitamin B12	187.5 (86.5)	300.9 (421.3)	250.1 (318.7)
Vitamin C	234.8 (125.2)	278.7 (240.4)	259.0 (195.4)
Vitamin D	39.5 (23.2)	36.7 (35.6)	37.4 (30.1)
Micro nutrients - Minerals			
Potassium	132.9 (25.4)	136.9 (55.7)	135.1 (44.1)
Calcium	81.1 (41.23)	74.5 (43.7)	77.4 (41.9)
Sodium	114.3 (50.0)	127.0 (83.1)	121.3 (69.4)
Magnesium	74.0 (16.0)	73.3 (27.5)	73.6 (22.7)
Phosphorus	154.0 (50.0)	143.4 (53.9)	148.1 (51.6)
Iron	113.2 (39.1)	125.9 (51.4)	120.2 (45.9)
Zinc	69.2 (31.6)	72.8 (48.5)	71.2 (41.2)

Continued

Table 3--continued.

	Group		
	BO (n = 13)	TC (n = 16)	Combined (n = 29)
Cholesterol	88.2 (56.7)	74.3 (42.3)	80.5 (48.8)
Fiber	68.2 (27.7)	65.8 (29.3)	66.9 (28.1)

Note: Standard deviations in parentheses; RDAs = Recommended Dietary Allowances. RDAs based on gender, age (25-50 years or 50+ years), and pretreatment weight.

had an average weight loss of 2.9 pounds (SD = 7.9 lbs). Patients who dropped out of the TC group completed an average of 2.8 phone sessions (SD = 3.3), with an average telephone contact time of 42 minutes (SD = 45.2).

Results of the pretreatment food diary analyses are presented in Tables 3 - 6. The average Food Diary Accuracy score (0 = not at all accurate; 4 = extremely accurate) was 3.25 (SD = .93) for Enrollees and 3.31 (SD = .89) for Completers ($p > .05$). T-tests investigating differences in macro and micro nutrient intake by group and program status (Enrollee versus Completer) were nonsignificant ($ps < .05$). However, female Enrollees consumed significantly less iron ($t[27] = 2.10$; $p < .05$; 95% of RDA for females, 131% for males) and derived significantly fewer calories from alcohol ($t[27] = 2.23$, $p < .05$; 0.0% of calories for females, 1.25% for males) than male Enrollees.

While protein consumption was approximately 125% of the U.S. RDA, intake of fat, carbohydrate, cholesterol, Kilocalories, and fiber ranged between 39 and 87 percent of the RDA. In terms of dietary balance, Enrollees and Completers had approximately 19% of Kilocalories from protein, 51% of Kilocalories from carbohydrate, and 28% of Kilocalories from fat. Across groups, percent of RDA ranged from 35% (Vitamin D) to 270% (Vitamin C) for vitamins, and between 73% (Zinc) to 153% (Phosphorus) for minerals. Notably, calcium (79%) and magnesium (75%) intakes were below the RDA, and consumption of sodium (127%), was above the RDA.

In the analysis of weight change from Pre - Post for Enrollees ($n = 43$), a paired sample t-test of the combined group was significant for body weight ($t[42] = 2.97$, $p < .005$; 1 tailed), but not BMI ($t[42] = .96$. $p > .05$; 1 tailed (Table 7 and 8).

Table 4

Average Percent of RDAs by Group for Completers

	Group		
	BO (n = 13)	TC (n = 7)	Combined (n = 20)
Kilocalories	71.1 (24.1)	72.7 (32.3)	71.7 (26.4)
Macro nutrients			
Protein	143.2 (42.5)	133.7 (47.8)	139.9 (43.4)
Carbohydrate	73.9 (24.8)	72.1 (25.9)	73.3 (24.5)
Fat	69.8 (38.9)	81.7 (54.4)	74.0 (43.9)
Saturated fat	63.3 (45.2)	77.1 (72.2)	68.2 (54.6)
Mono fat	81.7 (47.4)	97.6 (67.8)	87.3 (54.1)
Poly fat	40.5 (25.1)	39.4 (28.5)	40.1 (25.6)
Micro nutrients - Vitamins			
Vitamin A	128.2 (94.2)	224.6 (217.2)	162.0 (150.8)
Thiamin (B1)	152.0 (102.5)	105.9 (45.1)	135.9 (88.2)
Riboflavin (B2)	132.8 (86.4)	105.9 (45.6)	123.4 (73.5)
Niacin (B3)	153.4 (55.9)	139.0 (31.9)	148.4 (48.4)

Continued

Table 4--continued.

	Group		
	BO (n = 13)	TC (n = 7)	Combined (n = 20)
Micro nutrients - Vitamins			
Vitamin (B6)	91.1 (26.0)	90.9 (36.4)	91.0 (29.1)
Folate	116.3 (49.7)	120.0 (51.4)	117.6 (48.9)
Vitamin B12	187.5 (86.5)	452.1 (620.8)	280.2 (378.4)
Vitamin C	234.8 (125.2)	348.3 (319.6)	274.6 (212.7)
Vitamin D	39.5 (23.2)	23.0 (23.4)	33.7 (24.0)
Micro nutrients - Minerals			
Potassium	132.9 (25.7)	152.7 (70.3)	138.9 (45.4)
Calcium	81.1 (41.2)	80.0 (56.4)	80.7 (45.6)
Sodium	114.3 (50.0)	171.6 (104.5)	134.4 (76.3)
Magnesium	74.0 (16.0)	82.3 (31.6)	76.9 (22.2)
Phosphorus	154.0 (50.0)	167.1 (62.7)	158.6 (53.5)
Iron	113.2 (39.1)	148.4 (62.9)	125.6 (50.1)
Zinc	69.2 (31.6)	86.7 (70.2)	75.3 (47.6)

Continued

Table 4--continued.

	Group		
	BO (n = 13)	TC (n = 7)	Combined (n = 20)
Cholesterol	88.2 (56.7)	75.9 (41.6)	83.9 (51.1)
Fiber	68.2 (27.7)	72.0 (29.0)	69.6 (27.5)

Note: Standard deviations in parentheses; RDAs = Recommended Dietary Allowances. RDAs based on gender, age (25-50 years or 50+ years), and pretreatment weight.

Table 5

Percent of Kilocalories from Protein, Carbohydrate, Fat, and Alcohol by Group for Enrollees

	Group		
	BO (n = 13)	TC (n = 16)	Combined (n = 29)
Protein	20.4 (4.8)	17.3 (3.2)	18.7 (4.2)
Carbohydrate	51.6 (7.2)	52.8 (7.9)	52.2 (7.5)
Fat	27.4 (7.1)	28.9 (7.8)	28.2 (7.4)
Alcohol	.53 (1.1)	1.1 (2.7)	.86 (2.1)

A repeated measures multivariate analysis of variance (MANOVA) was used to investigate the effects of treatment on body weight and BMI. While analyses showed no interaction effect for Group X Time; $F(2, 40) = 1.51$; $p > .05$ and no main effect for Group; $F(2, 40) = 1.2$, $p > .05$, there was a significant main effect of Time; $F(2, 40) = 5.46$, $p < .01$ (Figure 1). Within subjects contrasts were significant for weight; $F(1, 41) = 9.24$; $p < .01$, but not BMI; $F(1, 41) = .90$; $p > .05$ (Table 7 and 8; Figure 2). Follow up t-tests showed significant differences in body weight for the TC group (mean weight loss

Table 6

Percent of Kilocalories from Protein, Carbohydrate, Fat, and Alcohol by Group for Completers

	Group		
	BO (n = 13)	TC (n = 7)	Combined (n = 20)
Protein	20.4 (4.8)	17.6 (2.3)	19.4 (4.3)
Carbohydrate	51.6 (7.3)	51.0 (6.2)	51.4 (6.8)
Fat	27.4 (7.1)	31.4 (7.4)	28.8 (7.3)
Alcohol	.54 (1.1)	.28 (.76)	.45 (.94)

6.08; $t(20) = 2.55$, $p < .01$, 1 tailed), but not the BO group (mean weight loss = 2.23 lbs, SD = 10.91 lbs; $t(21) = 1.59$, $p > .05$, 1 tailed) (Table 7).

For Completers ($n = 29$), t-tests for the combined group comparing pre- and posttreatment body weight ($t[28] = 2.64$, $p < .01$, 1 tailed) and BMI ($t[28] = 2.39$, $p < .05$, 1 tailed) were significant (Table 9 and 10). The MANOVA of body weight and BMI by group showed (a) an overall significant interaction effect for Group X Time; $F(2, 26) = 3.25$, $p < .05$, (b) a significant main effect for Time; $F(2, 26) = 7.37$, $p < .01$, but (c) no main effect for Group $F(2, 26) = 1.47$, $p > .05$ (Figure 2).

Table 7

Means and Standard Deviations for Body Weight by Group across Assessments for Enrollees

	Group		
	BO (n = 22)	TC (n = 21)	Combined (n = 43)
Pretreatment			
M	221.95_a	215.19_a	218.65_a
SD	36.47	39.15	37.51
Posttreatment			
M	219.72_a	209.11_b	214.54_b
SD	37.83	42.03	39.82

Note: Dissimilar subscripts down columns indicate significant differences within group across time (*p*s < .05).

Within-subjects contrasts for the interaction effect were significant for body weight; $F(1,27) = 6.74$, $p < .05$ as well as BMI; $F(1,27) = 6.28$, $p < .05$. Follow up paired sample t-tests for body weight were significant for the TC group ($t[6] = 2.40$, $p < .05$, 1 tailed), but not the BO group ($t[21] = 1.59$, $p > .05$, 1 tailed) (Table 9; Figure 3). The t-test for

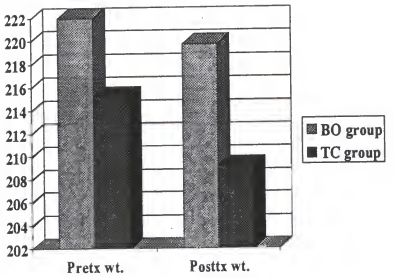

Figure 1. Body Weight by Treatment Period and Group for Enrollees

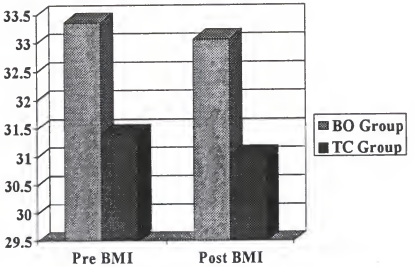

Figure 2. BMI by Treatment Period and Group for Enrollees

Table 8

Means and Standard Deviations for BMI by Group across Assessments for Enrollees

	Group		
	BO (n = 22)	TC (n = 21)	Combined (n = 43)
Pretreatment			
M	33.36	31.41	32.40
SD	4.41	4.30	4.42
Posttreatment			
M	33.07	31.03	32.07
SD	4.59	4.81	4.76

BMI was significant for the TC group; $t(6) = 2.31$, $p < .05$, 1 tailed, but not the BO group; $t(21) = 1.29$, $p > .05$, 1 tailed) (Table 10; Figure 4). There were insufficient data to analyze changes in weight and BMI from Post to Follow up.

Results of the pounds lost analyses are in Table 11. There was no difference in amount of pounds lost between the TC and BO group [$t(41) = 1.4$, $p > .05$). However, of patients losing weight, patients in the TC group lost significantly more weight from Pre to Post compared to patients in the BO group; $t(23) = 1.99$, $p < .05$. However, when

Table 9

Means and Standard Deviations for Body Weight by Group across Assessments for Completers

	Group		
	BO (n = 22)	TC (n = 7)	Combined (n = 29)
Pretreatment			
M	221.95_a	231.57_a	224.28_a
SD	36.47	30.99	34.94
Posttreatment			
M	219.72_a	219.92_b	219.78_b
SD	37.83	39.34	37.49

Note: Dissimilar subscripts down columns indicate significant differences within group across time (*p*s < .05).

pretreatment weight was used as a covariate, this difference was not significant; $F(1, 24) = 3.44$, $p > .05$. There were no significant differences in pounds lost between groups from Pre to Post for Completers; $t(17) = 1.87$, $p > .05$, or in pounds lost from Post to Follow up for Enrollees; $t(23) = 1.99$, $p > .05$ as well as Completers; $t(17) = .34$, $p > .05$.

Table 10

Means and Standard Deviations for BMI by Group across Assessments for Completers

	Group		
	BO (n = 22)	TC (n = 7)	Combined (n = 29)
Pretreatment			
M	33.36_a	32.32_a	33.11_a
SD	4.41	4.44	4.36
Posttreatment			
M	33.07_a	30.65_b	32.49_b
SD	4.58	5.27	4.78

Note: Dissimilar subscripts down columns indicate significant differences within group across time (*p*s < .05).

Table 12 shows weight change by treatment period for Enrollees. Significantly more Enrollees lost weight (*n* = 25) than gained or remained the same weight (*n* = 18) from Pre to Post (X^2 = 43.0, *p* <.05). Relatively more patients in the BO group gained weight (*n* = 7) compared to patients in the TC group (*n* = 3), but this differences was not statistically significant (X^2 = 1.8, *p* >.05). Only patients in the TC group (*n* = 3) lost more

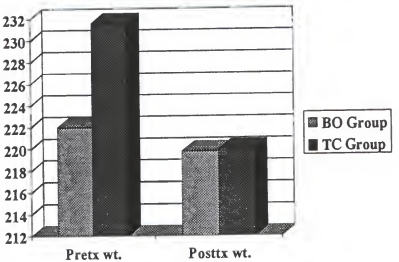

Figure 3. Body Weight by Treatment Period and Group for Completers

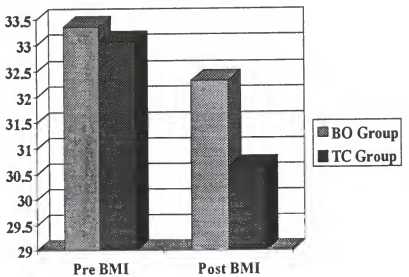

Figure 4. BMI by Treatment Period and Group for Completers

Table 11

Pounds Lost for Participants Losing Weight by Group and Assessment Period for Enrollees and Completers

	Group			
	Enrollees		Completers	
	BO	TC	BO	TC
Pre - Post	(n = 13)	(n = 12)	(n =13)	(n = 6)
M	6.53_a	12.37_b	6.53_a	13.58_a
SD	3.66	9.90	3.66	12.87
Post - FU	(n = 6)	(n =3)	(n =6)	(n = 2)
M	6.66_a	5.17_a	6.66_a	4.75_a
SD	7.33	3.33	7.33	4.59

Note: Within the Enrollee and Completer Groups, dissimilar subscripts across rows indicate significant differences (ps < .05). FU = follow up.

than sixteen pounds. Between Post and Follow up, more Enrollees gained or remained the same weight (n = 13) compared to patients who lost weight (n = 9), but this difference

Table 12

Weight Change by Treatment Period and Group for Enrollees

		Treatment Period			
		Pre - Post		Post - FU	
		BO	TC	BO	TC
		(n = 22)	(n = 21)	(n = 10)	(n = 12)
No Change/gain		9 (39)	9 (43)	4 (40)	9 (75)
Loss	1 - 5 lbs	6 (27)	3 (14)	3 (30)	1 (08)
	6 - 10 lbs	4 (18)	5 (24)	2 (20)	2 (17)
	11-15 lbs	3 (14)	1 (05)	0 (00)	0 (00)
	>16 lbs	0 (00)	3 (14)	1 (10)	0 (00)

Note: n's listed with % in parentheses. FU = follow up.

was not statistically significant ($X^2 = .02$, $p > .05$). Of Enrollees losing weight, losses were mainly less than ten pounds, with only one patient losing greater than sixteen pounds. For Completers (Table 13), significantly more patients lost weight ($n = 19$) than gained or remained the same weight ($n = 10$) from Pre to Post ($X^2 = 29.0$, $p < .001$).

Table 13

Weight Change by Treatment Period and Group for Completers

		Treatment Period			
		Pre - Post		Post - FU	
		BO (n = 22)	TC (n = 7)	BO (n = 10)	TC (n = 5)
No Change/gain		9 (41)	1 (13)	4 (40)	3 (60)
Loss	1 - 5 lbs	6 (27)	2 (29)	3 (30)	1 (20)
	6 - 10 lbs	4 (18)	2 (29)	2 (20)	1 (20)
	11-15 lbs	3 (14)	0 (00)	0 (00)	0 (00)
	>16 lbs	0 (00)	2 (29)	1 (10)	0 (00)

Note: n's listed with % in parentheses. FU = follow up.

More patients in the BO group (n = 9) had weight gain or no change in weight compared to patients in the TC group (n = 1), but the difference was not statistically significant (X^2 = 1.66, p >.05). From Post to Follow up, essentially equal numbers of patients gained/remained the same weight (n = 7) or lost weight (n = 8) (X^2 = .01, p >.05).

Analysis of the 3-day food diary and postcard return rates showed differences across groups (Table 14). For Enrollees, patients in the TC group (n = 16) returned more diaries from Pre to Post compared to patients in the BO group (n = 13), but this difference was not statistically significant (X^2 = .23, p >.05). Patients in the TC group also returned more postcards (n = 68 for TC group; n = 38 for BO group), but the average number of postcards received across groups was not significantly different; t(41) = 1.09, p >.05. There were no significant group differences in the number of diaries and postcards received from Post to Follow up (ps > .05). When collapsed across groups, significantly fewer postcards were received during the Post - Follow up period (n = 32) compared to the Pre - Post period (n = 104); T (42) = 3.04, p <.01. There were also fewer diaries returned from Post to Follow up, but this difference was not statistically significant (X^2 = 2.65, p >.05).

For Completers, patients in the BO group returned more diaries (n = 13 for BO group, n = 7 for TC group). However, there was an 100% return rate for the TC group; X^2 = 4.15, p <.05. Patient in the TC group returned significantly more postcards (n = .65 for the TC group, n = 38 for the BO group; T [27] = 4.92, p <.001) from Pre to Post (Table 15). There were no significant group differences from Post to Follow up in the number of diaries and postcards received (ps >.05). Compared to the Pre – Post period (n = 21), fewer food diaries were received during Post to Follow up (n = 3), but the difference was not significant (X^2 = 1.69, p >.05). Notably, the average number of postcards received was significantly greater for patients in the TC group during the Post – Follow up period; T (28) = 3.14, p <.01. Regarding telephone contact between patients

Table 14

Food Diary and Postcard Descriptives by Treatment Period and Group for Enrollees

	Treatment Period			
	Pre - Post		Post - FU	
	BO (n = 22)	TC (n = 21)	BO (n = 22)	TC (n = 21)
Total # Food Diaries	13	16	2	2
% Yes	59	76	9	10
% No	41	24	91	90
Total # Postcards	38.0	66.0	14.0	18.0
M	1.73	3.14	0.64	0.86
SD	3.56	4.84	2.57	2.87

Note: FU = Follow up

and therapists, average number of therapy minutes was 91 when an outlier of 405 minutes (SD = 104) was included, and 75 minutes without the outlier (SD = 77.5). Average number of therapist contacts was 5.4 (SD = 5.1). Notably, this distribution was not normal, with 33%

Table 15

Food Diary and Postcard Descriptives by Treatment Period and Group for Completers

	Treatment Period			
	Pre - Post		Post - FU	
	BO (n = 22)	TC (n = 7)	BO (n = 22)	TC (n = 7)
Total Food Diaries	13	7	2	1
% Yes	59_a	100_b	9_a	14_a
% No	41	00	91	86
Total Postcards	38	65	14	18
M	1.72_a	9.28_b	$.63_a$	2.57_b
SD	3.56	3.45	2.57	4.72

Note: Dissimilar subscripts indicate significant differences across groups (ps < .05).

FU = follow up.

(n = 7) completing twelve phone sessions, 5% (n = 1) completing eight, 5% (n = 1) completing six, 10% (n = 2) completing three, and 47% (n = 10) completing one session.

Testing of the relationship between amount of therapist contact and pounds lost revealed a significant positive Pearson correlation ($r = .50$; $p < .05$), with Enrollees who received more therapy contact time losing more weight. However, when the therapy contact outlier was omitted, this relationship was no longer significant. This relationship was also not significant for Completers ($n = 7$; $p > .05$).

For both Enrollees and Completers, the number of pounds lost was significantly correlated with the number of completed self-monitoring postcards during the Pre - Posttreatment period (Pearson $r = .36$, $p < .05$ for Enrollees; Pearson $r = .42$, $p < .05$ for Completers). In addition, number of pounds lost was significantly related to listing status (Spearman rho = .39, $p < .01$ for Enrollees; Spearman rho = .43; $p < .05$ for Completers). Analyses showed that listed Enrollees lost significantly more weight (7.9 pounds, SD = 7.8 lbs) than unlisted Enrollees (2.1 pounds, SD = 9.1 lbs); $T(41) = 2.09$, $p < .05$, and listed Completers lost more weight (8.4 pounds; SD = 8.2 lbs) than unlisted Completers (2.1 pounds; SD = 9.1 lbs), but the difference was not statistically significant; $T(27) = 1.87$, $p > .05$.

With regards to the weight loss techniques tried, of the seven tele hone contact patients who completed all twelve sessions, 100% reported self monitoring, calculating calorie intake, monitoring fat intake, and following a calorie goal daily. Other frequently used techniques (between 3-6 days per week) included limiting the number of meals and uncontrolled eating episodes, and stimulus control (e.g., making food less visible, grocery shopping on a full stomach). Less frequently used techniques (less than two times per week) included rewards and preplanning.

DISCUSSION

The major finding of this exploratory, treatment outcome study was that two minimal intervention programs were associated with weight losses for mild to moderately obese heart transplant candidates considered for heart transplantation listing. Participants benefited from a bibliotherapy-only weight loss program as well as a bibliotherapy plus telephone contact program in which all participants received a bibliotherapy manual containing cognitive/behavioral strategies for weight loss as well as pretreatment coaching on self-monitoring, energy balance, and the Food Guide Pyramid. While the average weight loss was below that of standard outpatient behavioral programs (Perri & Fuller, 1995; average weight loss = 18 lbs), the number of pounds lost for patients in the telephone contact group (6 lbs) was comparable to findings from other empirical investigations of minimal intervention programs involving healthy participants (Black et al., 1984; Lasater et al., 1991; eight pound average weight loss). Furthermore, weight losses between twenty and thirty pounds were realized showing that significant weight losses were possible with a minimal intervention approach.

As expected, individuals receiving up to twelve weekly phone sessions lost more weight than patients receiving only a brief pretreatment consultation and information regarding weight loss. Since the main goal of the telephone sessions was to review the weight loss strategies outlined in the bibliotherapy manual, patients in the telephone

contact group may have benefited from instruction and discussion of cognitive and behavioral weight loss techniques. Alternatively, ongoing contact with a professional regarding weight loss issues may have fostered greater participant adherence to newly established weight loss goals/behaviors; a hypothesis supported by the finding that patients in the telephone contact condition returned relatively more food diaries and weekly self-monitoring postcards. Phone contact may have also facilitated weight loss by providing patients with a forum to address issues that may have potentially impeded weight loss efforts. Finally, it is possible given the illness severity of this sample that the interpersonal contact alone may have provided the support and encouragement needed for patients to initiate and/or maintain weight loss efforts.

Analysis of the pretreatment 3-day food diaries showed that macro nutrient (protein, carbohydrate, and fat) intake closely matched current RDAs for the general population (Rolfes, DeBruyne, & Whitney, 1998). Intake of fats (saturated, polyunsaturated, and monounsaturated), cholesterol, and Kilocalories was below the RDA for healthy individuals by approximately thirty percent. This finding was not surprisingly given that these individuals had been referred for weight loss and they had just enrolled in a weight loss program. It is possible that the reactive effect of dietary self-monitoring on food intake may have skewed the data towards lower RDA percentages. Also, imprecise food recording may have also affected the reliability of the food diary data.

An interesting finding was that patients were consuming more protein (approximately 125% of RDA) than carbohydrate (approximately 70% of RDA) at the start of treatment. Review of the dietary records revealed that patients' main protein

sources were animal (cooked meat including veal, pork, steak, hamburger, roast beef, fish, poultry) as well as milk products. While potatoes were moderately consumed, very few patients had beans, lentils, soy products, peas, or nuts as a protein source. Problems with a diet high in meat but not dairy and other products is that it can increase the loss of calcium in the body. Furthermore, a high-protein diet may strain the kidneys due to the excretion of extra waste products from protein metabolism (Margen, 1992).

Another troubling finding from the food diary analyses was that patients' fiber intake was approximately thirty percent below the RDA. This finding suggests that intake of grains, fruits, and vegetables was below recommended levels. Given that fibrous foods tend to be filling, rich in vitamins and minerals, and that fiber has been hypothesized to play a role in reducing the risk of many of the leading chronic diseases, it would seem a prudent food choice for heart transplant candidates. Moreover, fiber possesses several potential benefits for individuals in need of weight loss. First, most high-fiber foods are low in fat and high in complex carbohydrates which is a good ratio for weight control since carbohydrates have far fewer calories than fat per gram. Second, eating fibrous foods tends to leave less room for high-fat, high-calorie items which can also help promote weight loss. Finally, inclusion of high fiber foods during mealtimes can slow down eating (as many take longer to chew), which can be particularly beneficial for overweight individuals who tend to eat rapidly.

Food diary analyses also revealed generally adequate intake of fat- and water-soluble vitamins. Notably, intake of Vitamin D was particularly low, with patients only consuming about thirty-five percent of the recommended daily allowance. However,

given that Vitamin D can be adequately manufactured by the body through exposure to ten to fifteen minutes of sunlight three times weekly, this deficit was not alarming given participants' southeastern locale.

Mineral consumption was adequate for potassium, iron, and phosphorus, but below desired levels (approximately seventy percent of the RDA) for calcium, magnesium, and zinc. In light of patients' greater protein consumption and limited intake of dark green leafy vegetables, tofu, whole grains, wheat bran, nuts, and beans, this lack was not unanticipated. However, since calcium and magnesium are involved in the regulation of heart rhythm and other muscle contractions, maintenance of adequate intake of these minerals would seem essential for heart patients. Furthermore, these minerals play a key role in minimizing the risks of osteoporosis and hypertension. Perhaps through brief dietary counseling and more careful food selection, adequate intake levels of these nutrients may be achieved. It is also possible that exposure to the new dietary reference intake (DRI) guidelines (a revised nutritional standards system which aims to prevent nutrient deficiencies as well as decrease the risk of chronic disease including cardiovascular disease through nutrition) may help boost heart patients' intake of nutrient-rich food items (Barrett, 1997).

Unexpectantly, patients were found to be consuming approximately 127% of the RDA of sodium. Given that a significant number of patients complained about the lack of flavor of low-fat/non-fat products, it is likely that they may have used salt as a way to increase the palatability of their foods. However, such a finding is concerning given that patients referred for this study had been previously instructed to follow a low-sodium diet

as a part of the management of their heart disease. This finding is particularly troublesome since salt consumption may exacerbate or contribute to worsening heart functioning as well as increase the risk of stroke and kidney disease by affecting blood pressure (Margen, 1992).

The minimal differences in weight losses between patients who entered the study (Enrollees) and patients who completed three months of treatment (Completers) was not surprisingly given uneven attrition across groups. In fact, the number of patients in the telephone contact group declined considerably by posttreatment ($n = 7$). With such a dramatic reduction in the sample size, the current results need to be interpreted cautiously in light of concerns regarding statistical power. Furthermore, because one would expect decreased effect sizes between groups due to a lessened impact of treatment over time on weight and adherence measures, the importance of consideration of Type 2 error in the interpretation of findings from Post to Follow up cannot be underscored. Despite statistical power and effect sizes issues, the fact that patients who lost weight in the telephone contact group lost significantly more than patients in the bibliotherapy-only group and that they showed greater treatment adherence supports the added benefits of telephone contact in a minimal intervention program for weight loss. Additionally, informal data in the form of participant comments from patients in the telephone contact group suggested that despite study withdrawal, patients had learned valuable skills via the telephone treatment sessions which may be applied in the future.

While most participants lost as opposed to gained or remained the same weight from Pre to Post, more patients gained or remained the same weight between Post and

Follow up. This pattern of findings was not surprising and aptly parallels previous research showing greater weight losses during the initial phases of treatment and continued weight loss with ongoing treatment involvement (Bennett, 1986; Perri, Nezu, Patti, & McCann, 1989). Given that significantly fewer patients had completed self-monitoring postcards and 3-day food diaries during the second half of treatment, it is likely that decreased adherence to behaviors necessary for weight loss contributed to the reversed trends. As found in previous research investigating long-term weight loss, ongoing therapeutic contact was associated with greater weight losses (Perri et al., 1987). That listing status was significantly related to amount of weight lost for treatment Enrollees as well as Completers suggests that these patients may have been more motivated to adhere to a weight loss program for health reasons or possibly to please their physician. Patients who were listed may have also been more health conscious, thereby potentially having less difficulty following a low-fat and reduced calorie diet.

From a cost-effectiveness standpoint, the overall findings are encouraging. To date, standard behavioral treatments have generally resulted in an average of one pound of weight lost per hour of treatment. In the present study, participants in the telephone contact condition lost approximately six pounds per hour of treatment showing greater treatment cost-effectiveness. Such information supports the concept of implementing a telephone-delivered, cognitive/behavioral weight loss program for heart transplant candidates. It can be argued that a major strength of a telephone contact approach is the accessibility to greater numbers of people in need of weight loss, at minimal personal and institutional costs. However, because of the significant attrition in the telephone contact

group, the cost advantages of offering such an outpatient program to other heart transplant candidates must be weighed cautiously vis a vis service delivery issues.

In the absence of a nontreatment control group as well as prior research, it is unclear if a telephone contact minimal intervention program is the most appropriate and effective weight loss treatment for this population. It is possible that an advanced, technology-based, distance education weight loss program may prove just as effective as a telephone contact program and at even greater savings to patients and service providers. Meyers, Graves, Whelan and Barclay (1996) recently found a television-delivered behavioral weight loss program to be as effective in promoting weight loss as a live contact program (average weight loss approximately nine pounds). Unfortunately, study confounds (e.g., participant contact with therapist during treatment) precluded firm conclusions about the efficacy of the intervention. Nevertheless, given the broad scope of obesity and the necessity for more cost-efficient treatments, further exploration of technology-based weight loss therapies seems worthwhile. However, it will be important for practitioners and researchers to not overlook the needs of patients and to monitor closely how program participants perceive and react to interventions involving limited contact from professionals

An unexpected finding given that patients had been referred for assistance with weight loss was that approximately twenty percent declined to participate. Since there were no monetary fees for study enrollment, it is highly unlikely that patients declined due to study costs. A more likely explanation is that study nonparticipants lived significantly farther away from Shands Hospital. Even though the treatment did not require frequent

trips to the hospital and assessments were generally coordinated with patients' medical visits, participants were told at the time of consent that they would need to return to Shands Hospital twice. Therefore, it is possible that perceived travel demands/costs may have deterred participation. Alternatively, given their poor health status, patients may have been reluctant to participate in a treatment study as a way of minimizing stress (e.g., avoiding driving) and guarding their health. In addition, medical, dietary, and weight history may have influenced patients' willingness to participate with individuals who possessed more extensive medical histories, longer periods of poor health, more failed weight loss attempts, or who were less overweight potentially perceiving fewer benefits of study involvement despite information about the potential benefits of weight loss. Notably, nonparticipants did have relatively lower pretreatment weights, and it is suspected that heavier patients received more explicit weight loss recommendations from physicians. If this were the case, more overweight patients may have perceived weight loss as a higher priority compared to less overweight patients and may have been more receptive to assistance with weight loss.

Due to study attrition, conclusions about the strategies associated with successful weight loss must remain tentative. However, analysis of the weight loss techniques tried suggests that the heart transplant candidates profited most from using fundamental behavioral techniques including self-monitoring, calorie and fat gram goals, and stimulus control techniques. Less frequent use of preplanning and rewards may have been due to the perceived lack of time and limited resources. Since heart patients often make frequent visits to the hospital for emergency or ongoing medical care, it made sense that the

participants in this study were less inclined to use more complex and time-consuming strategies.

Reasons for study withdrawal were variable and included "no time" and "lack of current interest." Given that most participants traveled significant distances (average = 120 miles) to Shands Hospital on a routine basis, patients' report of time constraints was understandable. Anecdotally, patients also did not seem to have the willingness or energy to attend another appointment when they were already spending hours, and in some instances days, completing medical tests. It was also not surprising that patients who had medical contraindications for transplantation or who were considered "too healthy" for transplant tended to withdraw from the study. Patients without contingencies for weight loss were probably less motivated to enroll in a weight loss program since it was not deemed mandatory by their physician. Notably, a number of patients expressed an interest in receiving personalized dietary instruction beyond the scope of outlined treatment intervention. Thus, dissatisfaction with the lack of more specific dietary recommendations may have prompted study withdrawal. Additional reasons for attrition may have been related to dietary history (e.g., long-term weight problems, binge eating), health status (e.g., feeling too unwell to participate), readiness for change (e.g., a 'Precontemplation' or 'Contemplation' stages of change (Prochaska, 1984), social (e.g., no support in weight loss efforts), and/or emotional factors (e.g., frustration with dietary restrictions, feelings of deprivation, depression).

Given that this is one of the first empirical efforts to investigate the effectiveness of a minimal weight loss program for heart transplant patients, the need for study replication

and extension is underscored. However, in considering future weight loss treatment efforts, researchers are cautioned regarding the following study limitations. First, the sample consisted of predominantly Caucasian, male, well-educated, mild to moderately obese cardiac patients in consideration of orthotopic cardiac transplantation. Therefore, attention to participant sociodemographic and health background information in the development of future minimal intervention programs for other medical populations such as liver, kidney, or lung transplant candidates or recipients will be imperative.

Second, the current study did not explore personality/psychological factors that may affect weight loss. Importantly, prior research has found higher levels of psychiatric morbidity in patients waiting for transplantation (Caine, Sharples, English, & Wallwork, 1990). In addition, personality characteristics have previously been found to interact with weight loss treatment parameters (Rozensky & Bellack, 1976). Finally, preliminary studies investigating the relationship between psychiatric factors and weight loss also suggest a potentially mediating effect of depression and personality disorders on weight loss success (Berman, Berman, Heymsfield, Fauci, & Ackerman, 1993; Wadden, Stunkard, & Smoller, 1986). Thus, attention to psychological factors in future research is critical, particularly in working with patients who are seriously ill or experiencing problems adjusting to their illness. Awareness and sensitivity to potential participant resistance from patients referred for weight loss may also maximize treatment efficacy.

Overall, the results of this study offer some exciting possibilities. The outcome generally suggests the potential implementation of a "minimalist" weight loss approach for treatment of overweight heart transplant candidates. While the weight losses in this study

may not appear clinically significant, accumulating research suggests that small weight losses can produce significant improvements in health (Blackburn & Kanders, 1987; Hypertension Prevention Trial Research Group, 1990; Wadden, Stunkard, & Brownell, 1983). Wing et al. (1987), for example, has documented long-term (1 year) improvements in measures of blood-glucose control, and blood lipid levels with weight losses between five and fourteen pounds in diabetic patients. Reductions in weight can also lower blood pressure, cholesterol and triglyceride levels, as well as increase mobility (Seabrook, 1997). Finally, weight loss success may directly enhance emotional well-being and quality of life while indirectly improve health care delivery by minimizing avoidable inpatient and outpatient service usage (Manzetti, Hoffman, Sereika, Sciurba, & Griffith, 1994; Quesenberry, Caan, & Jacobson, 1998; Wadden & Stunkard, 1986).

In light of the unique health, social, and psychological circumstances of medical patients, adoption a flexible treatment approach which allows for treatment tailoring may prove most efficacious in working with patients in need of weight loss. Given that a number of participants dropped-out of the present study due to a time constraints, it is recommended that investigators aim to minimize time demands (e.g., by integrating weight loss interventions with medical appointments, conducting assessments by phone) without compromising treatment integrity. While this study chose not to require a monetary deposit for treatment enrollment and unfortunately lacked sufficient funds to provide monetary rewards for participation, prior research suggests that the inclusion of incentives may promote weight loss success (Black & Friesan, 1983). If suitable given participants' socioeconomic status, potentially beneficial may be enrollment fees which are refunded

over time. Also useful may be monetary rewards or other benefits for program participation.

From an empirical standpoint, it will be essential to track medical factors potentially related to weight loss (e.g., use of diuretics, changes in health status) in order to avoid spurious effects. If ethically feasible, inclusion of a nontreatment control group may allow more firm conclusions about program effectiveness, particularly with patient populations susceptible to weight fluctuations. Furthermore, issues related to the amount and type of therapist contact vis a vis different patient groups warrants further investigation to elucidate salient program and patient factors which may affect treatment outcome. Finally, attention to issues related to the maintenance of weight loss will be essential given that weight regain remains a significant and ongoing dilemma in the area of weight loss management.

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APPENDIX A
BIBLIOTHERAPY MANUAL

Heart Transplant Candidate Weight Loss Intervention Trial University of Florida/Shands Hospital

Department of Clinical & Health Psychology

Tricia L. Park, M.S.
James R. Rodrigue, Ph.D.
Michael G. Perri, Ph.D.

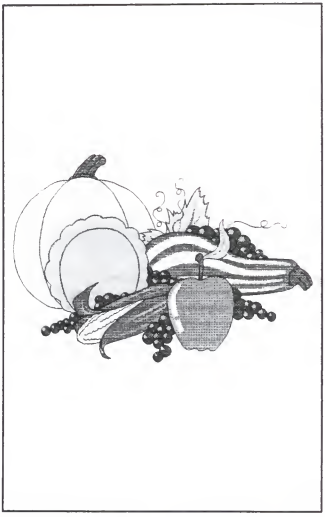
▬FOOD RECORD INSTRUCTIONS▬
♦GENERAL GUIDELINES♦

1. Please record EVERYTHING you eat and drink on the days specified, including all food and drinks for meals and snacks. For each food and drink, please be exact as to the general or brand name of the product. Include all fats like butter and sauces/dressings used in cooking and at the table.

2. When listing amounts, please use household measuring cups and spoons for all liquids and soft foods. For whole foods, please record amounts. Also list length, width, and thickness with a household ruler and record actual amount eaten.

3. Whenever possible, please precount and premeasure any meals or snacks to be eaten away from home and record the actual amount eaten.

4. The actual amount eaten is equal to the total amount measured minus the amount not eaten.



Be Concise!

5. When eating out, it may not be easy to measure your food. Portion sizes and ingredients are often on the menu. If not, ask your server for portion sizes and ingredients for food and drinks ordered. Health conscious diners do this all the time. The portion sizes given for meat will usually be the raw weight. Record actual amount(s) eaten. For meals from fast food restaurants, record name of restaurant and the brand name, size, and amount of food or drink eaten. For example: Burger King Whopper w/cheese, lettuce, tomato, onions, pickle, mayonnaise, ketchup, and mustard - 3/4 eaten, 1 small fries - all eaten, large vanilla shake.

Developed by Food Science and Human Nutrition Department of IFAS

▬FOOD RECORD INSTRUCTIONS▬
♦SPECIFIC GUIDELINES♦

FOOD	DESCRIPTION	Amount
Coffee, tea	Coffee-ground or instant? Tea-teabags or instant? Decaffeinated? Served black? Sugar or sugar substitute? Cream, milk, non-dairy substitute added? Powdered or liquid? List additions and amounts on separate lines. Record brand names of drinks & additions.	How much does your cup, mug, or glass hold?
Juices, drinks	Kind/flavor? Is it fruit juice, nectar, or sodas. Made from powdered or frozen concentrate? Low-calorie? Non-calorie? Carbonated? Added Vitamin C? Brand name?	One measuring cup, in fluid ounces.
Milk, milk shakes, yogurt	Whole milk? Low fat, Skim (nonfat), Chocolate drink? Fresh? Canned? Made from milk? Brand? Any additives, powders, chocolate syrup? Please record these on separate lines. Yogurt-fruited or plain? Sweetened with sugar, Nutrasweet, etc. What percent milk fat? Brand?	Measure portion in fluid ounces.
Alcoholic Drinks	BEER-Brand? Light? WINE-red, white, pink? Brand name? LIQUOR-what kind? If mixed drink-name of drink? What is it mixed with? Fruited drink-what juices used?	In ounces: 1 shot=1.5 1 glass wine=8 1 glass beer=8 1 can beer=12
Bread, rolls, and bagels	Kind? white, whole wheat, rye, pumpernickel, raisin, Italian?	Number of slices, size of slice

FOOD	DESCRIPTION	Amount
Salad		
	Please record all items in the salad: lettuce, tomato, cucumber, cheese, croutons, bacon bits. Salad dressing? Regular or low calorie? Report main salad items and dressing on separate lines and circle parts to indicate they are one unit.	Record in cups or parts of cup. Record salad dressing & other additions in tsp. or Tbsp.
Mixed dishes: Stews, soups and casseroles		
	Name of food. Main items in it. If homemade, please include copy of recipe. If canned, frozen or ready to eat, please give brand name. Were soups prepared with water, milk, cream, or ½ water, ½ milk? Report mixed dish on one line and any added ingredients separately.	Record as cups or part of a cup or as amount given on can, package, etc. Record only amount eaten.
Cereals		
	Kind? Ready to eat? Sugar coated? If hot cereal, was it instant, quick, or regular cooking? Brand name? Milk added-type of milk? Record on separate line. Sugar or artificial sweetener added? Butter or margarine? Record additions on separate line.	Record in cups or part of cup for cereal and milk, or as weights on pkg. Record only portion eaten.
Rice/Pasta		
	Rice-white, brown, long grain, wild? Pasta-whole wheat, regular? Record shape/type of pasta. Instant, quick, or long cooking rice? Brand name? Record added salt, butter, margarine, etc. Record added ingredients on separate line.	Record in cups or parts of a cup. Record additives in tsp. or Tbsp.
Eggs		
	Fresh whole, or egg substitute? Brand of frozen, dried, or liquid egg. Size of eggs-small, medium, large, extra large?	Number of eggs or amount of egg substitute

FOOD	DESCRIPTION	Amount
Cheese		
	Kind/name? processed, imitation, lowfat? Brand? Sliced, grated, slices, cups, cubed, etc. American cheese?	Number of slices or parts of a cup (food slices are 3/4 oz.)
Meat, fish, and poultry		
	Kind of meat-beef, pork, lamb, poultry, fish. What part, cut, or type: sirloin steak, chicken thigh, pork loin chops, flounder fillet, etc? Is bone included or boneless? Is meat sliced, ground, or chopped? Fresh cooked, pickled, frozen, canned, dried, luncheon? Batter dipped, flour dipped, breaded? How cooked-fried, baked, broiled, roasted? Did you eat the skin? Did you eat both the fat and lean? Did you add sauce, gravy, stuffing, butter, margarine, etc. If so, record on separate line.	If known, give raw weight of portion eaten. For cooked meat give dimensions: length, width, thickness. Rule of thumb: palm size & thickness is approx=3-4oz of meat, fish or poultry. State whether raw or cooked wgt.
Frozen Dinners		
	Dinner, breakfast, lunch, or entree? Brand name? List foods included, each on a separate line. Draw circle around all items to indicate a unit.	Give package weight or tell if regular or extra large portions. Note for each food item how much you ate.
Cakes, pies, cookies, and pastries		
	Kind (chocolate pie, Danish pastry, etc.)? Brand name (e.g., Sara Lee)? Homemade-include recipe. Iced? Kind of icing, filling (lemon, chocolate, etc.) One or two crust pie? Number of layers or fraction of pie/cake? Cupcake? Iced?	For square or rectangular piece Give dimensions. For wedges, record size, ht. & diameter.

FOOD	DESCRIPTION	Amount
Ice cream, candy, puddings, and gelatin		
	Brand name? Kind and flavor? Ice cream, ice milk, frozen yogurt, sherbet? Chocolate, vanilla, fudge? Hardened or soft serve? Gelatin or pudding-kind, flavor, brand name? Regular, reduced calorie? Made with water or milk? What percent fat milk? Canned or homemade? Brand name of candy bars or other candy? Regular, low calorie, or dietetic type? Hard candy, fudge type, or chocolate? With almonds, peanuts, etc. If whipped cream, sprinkles, or other toppings.	Record as cups parts of a cup. Give weight of pkg of items. Give size of pieces of candy. Record toppings as portions of a cup, tsp. or Tbsp.
Crackers, Chips, puffs, popcorn, and pretzels		
	Chips. Potato: what flavor? Corn or Tortilla chips: what flavor? Brand name? Cheese puffs or crunchies or balls: brand name? Pretzels: type (Bavarian, sticks, etc). Brand? Popcorn: popped in oil, air popped? Carmel coated? All items: salted, reduced salt, no salt?	Record number of pieces, cups or parts of cup, weight or portion of package (give total weight).
Gravies		
	Specify kind, brand name. Canned, jarred, sauces, dips or powder mix? Homemade?	Record as number of level tsp.
Butter		
	Brand name? Regular or diet? Salted or unsalted? Whipped? Liquid? Margarine? Cream cheese?	Tbsp., cups, or tsp.
Jam, jelly, or syrup		
	Kind? Brand name? Regular or low sugar? Preserves?	Tbsp. or tsp.
Honey, sugar, or sugar substitute		
	Kind? Brand? white, brown, or powdered?	Tbsp. or tsp.
Mayonnaise, sour cream, salad dressing, oil, vinegar, and lemon juice		
	Kind? Brand? Regular, lowfat, nonfat, cholesterol free?	Tbsp. or tsp.

UNIVERSITY OF FLORIDA

★★★ ☞ Lesson 1 ☜ ★★★

You and Your Eating

★This is the first lesson of your program. There are several key steps in this lesson that form the basis for the changes you will make in your eating and lifestyle. The lessons are arranged in an orderly fashion. Think of the program as climbing a flight of stairs. Taking one step at a time is simple and will lead you to the top. Reaching the top means creating eating habits that are under your control and that will result in gradual yet substantial weight loss.

★The gradual nature of the program and the series of steps are necessary. By taking one step at a time, you will be able to make the small changes that will result in weight loss. You will also be better able to stick with these changes and to make them part of your life. However, if you try jumping from the first to the fifth step, you may be sure of falling back to where you started. It is so important to take one step of the program at a time.

★This step approach has been successful for many, many people. The major reason for the small success of other weight loss programs is that changes are rapid rather than the gradual learning of new behavior, which we emphasize. So, to be successful in the long run, you must take one step at a time.

★The major task for you this week is to identify how eating is a problem for you. Most overweight people eat in response to many influences in addition to being hungry. It will be important for you to figure out your eating patterns. The program begins with an emphasis on figuring out your eating habits before you begin to change them.

★Most people who are overweight are "out of touch" with their eating. That is, they are unaware of the conditions under which they eat. For example, if you ask yourself **how often** you eat, **where** you eat, and **with whom** you eat, your answers will likely be different than someone who kept a close record of it. Although you could say that you eat because you are bored, or perhaps upset, the first lesson of this program will ask you to be more specific and precise by keeping record of your eating.

★Looking 0bjectively at Your Eating★

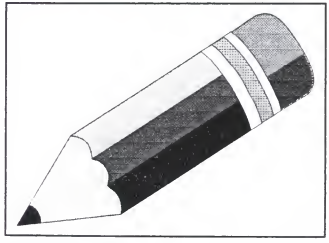
⋆The **first step**, is for you to look at your eating like an outside observer. To say that you eat too much is not specific or accurate enough. Your eating occurs in certain situations that are unique to you. Each person has his/her own lifestyle involving family, work, and friends. The purpose of this program is to figure out how situations influence your eating. It will be important for you to identify these influences on your eating in order to use the strategies we shall present. For example, if you know the times of the day that you tend to overeat, then this information can help in controlling your eating.

⋆For this first step you want to observe your eating. Record what you eat right after each meal or snack. If it is hard for you to record what you eat soon after eating, you should plan to record it as soon as possible. The food logs which you have been given will help you complete this task. The longer you wait to write down what you ate, the greater the chance you may be inaccurate or forget. **Remember, if you have the time to eat something, you have the time to record it!**

⋆⋆⋆It is critical that you do not change your eating in any way during this week. It is important that we get an accurate picture of your current eating habits before you make changes.

♣Summary of New Steps to be Completed this Week:

1. Record everything that you eat in your food logs. This is called self-monitoring.
2. Record calories and fat grams consumed per day in your food logs.



Good Luck!

⊙⊙⊙⊙⊙ Lesson 2 ⊙⊙⊙⊙⊙
Controlling Your Eating

Several new topics will be introduced with each lesson. Before we begin Lesson 2, let's review what we did in Lesson 1. Look at your food logs. Were any meals or snacks left unrecorded? If so, you should be careful to record **all** your food intake in the future.

Controlling Your Eating

→Step 1. Analyzing Your Eating Patterns. The first step in this lesson will be to look at your Food logs. Before changing your eating, you should become aware of your eating patterns. So, make a chart like the one provided below (see Table 1). This chart was made by Kurt after he looked at his eating during his first week of self monitoring. Kurt then made several tables. The first table relates to the time of day of his eating.

Table 1
Kurt's Eating Times

Time of Day	Mon	Tues	Wed.	Thur	Fri	Sat	Sun
a.m.	9:30	8:00	7:45	8:00	7:45	9:30	9:30
Snack	10:15	9:30	--	11:00	9:00	--	10:15
Lunch	1:15	12:30	12:30	12:30	12:30	1:15	1:15
Snack	4:00	3:00	--	2:00	4:00	--	3:00
Dinner	6:00	6:00	6:30	6:15	6:30	6:00	6:30
Snack	8:00	9:30	--	--	9:15	--	8:00

From the table, we see that he eats breakfast, lunch, and dinner at about the same time each day. He also snacks frequently, which does not seem to be related to any time of day. Kurt would want to look closely at his records to find out what made Wednesday's and Saturday's eating limited to meal time. ***See if you can find any specific times or days in which you tend to snack or overeat.***

Table 2
Kurt's Social Table

■Alone: 7 times ■ With Others: 33 times

Kurt's Social Table shows that he ate with others about 90% of the time. In fact, breakfast was the only meal he ate alone. Kurt realized that he frequently ate because others were eating. ***Look at your eating habits with others and see what impact they have on your eating patterns***.

The third feature of Kurt's analysis is also very important. Kurt listed the places where he eats and how often he finds himself eating there:

Place	Frequency	Place	Frequency
Kitchen	///// ///	Cafeteria	////
Living room	///// ///	Coffee room	///// ///
Bedroom	///// ///	Hall at work	//
Car	/////	Backyard	/
Desk	//	Friend's house	///
Movies	/		

As you can see, Kurt's eating is not limited to one spot, such as the kitchen. He eats in the car, has food in his desk at work, and he drinks coffee in bed while he is reading. Find out ***where*** you have been eating this past week. ***What are your trouble spots***? Finally, Kurt closely looked at the events occurring ***before and after his eating and his mood while eating*** to see if there were any patterns. He noticed a few things. For instance, his wife's eating entices him to eat. The same thing is true when his coworkers are going for a snack. The purpose of this step is to make you more aware of the conditions under which you eat. For example, suppose that you tend to eat alone. The presence of other people may then cause you to eat less.

A major point of this exercise is that each person's eating is very much an individual matter. All of us are very different. The events that lead one person to eat do not necessarily influence another person. If you spend a good deal of time with this part of the analysis, it is sure to pay off!

♣ Summary of Steps to do This Week:
1. Analyze your food logs to identify eating patterns.

♣ Continue to:
1. Record calories and fat grams eaten per day in your food log.

⇒⇒⇒⇒⇒ Lesson 3 ⇐⇐⇐⇐⇐

Controlling the Factors that Influence your Eating

Over the past two weeks you have become more aware of your eating habits, including the caloric content of the food you eat. Now we will focus on some **factors that affect why, when, and where you eat.** We will also present ways to deal with these factors. In this lesson you will learn four specific steps for controlling your eating.

Step 1. Decrease the number of situations in which eating occurs. Review your logs. Has your eating occurred in many different situations in the past? As a first step in reducing the situational control over your eating, you will begin to limit yourself to **3 meals and 1 planned and controlled eating (PCE) per day (i.e., one planned snack such as a piece of fruit).** All your food intake should occur at these times. Decreasing the number of situations during which you eat will help you to remain within your calorie limit.

Step 2. Schedule Meals to help you gain greater control. Each day try to plan when and where you will eat. You should schedule your meals at the same time and place every day. Avoid eating too late in the evening because you will have little time to digest your food before going to bed. The goal is for you to plan and control when you eat rather than allowing your environment do it. The presence of others, access to the refrigerator, and food ads should have less and less control over your eating.

Step 3. Limit Uncontrolled Eating. If you eat at times which were not planned or you eat more than three meals and one PCE per day, you should record this in your notebook as an **"uncontrolled eating" (UCE). Try to limit your UCE to a total of four this week**, and work towards eliminating all UCE's.

Step 4. List Important Activities. In this final step, you will make a list of activities which will help you control your eating. The activities on this list will be called **INHIBITORS**. An inhibitor is an activity which will interfere with your desire to eat or interrupt eating. Chewing gum, playing the piano, and exercising are classified as inhibitors. Notice that it is difficult or impossible to eat while you do an inhibitor.

Reading can be a great Inhibitor.

To be an inhibitor, the activity should be something that you can begin easily. If you enjoy the inhibiting activity, so much the better, although such chores as ironing can be inhibitors. Look at a list of inhibitors made by Brian. Notice how his activities were things that can't be done while eating, difficult to stop once initiated, and enjoyable.

Brian's Inhibitors:

⊠Play tennis	⊠Brush teeth
⊠Talk on the phone	⊠Take a shower
⊠Go for a walk	⊠Give the dog a bath
⊠Chew gum	⊠Read a book

One of the best ways to avoid eating is to be actively involved in something. It will be well worth the time you invest now on your list of inhibitors so be creative!

You will probably be tempted to eat when you have planned not to eat. Before this happens, prepare yourself by keeping your list of personal inhibitors handy. When you have a strong desire to eat, you should engage in one of these behaviors. In addition, you should also use the list of free foods provided below.

There are certain **"Free" Foods** which you may have any time and which need not be recorded as an uncontrolled eating. Free foods include:

black coffee	plain water	rhubarb
plain tea	bouillon	cabbage
diet soda	seltzer	celery
sugarless gum	mineral water	cucumbers
scallions	mushrooms	radishes
zucchini	unsweetened cranberries	

Thus, if you need something in addition to the three meals and PCE, use a "free" food to tide you over. This step emphasizes your regulation and planning of meals. No food should be eaten between meals other than those "free" foods listed above.

♣Summary of New Steps:

1. Decrease your number of eating situations to three meals and one PCE per day.
2. Fill out the meal schedule to plan the times and places for your meals in advance.
3. Record any uncontrolled eatings (UCEs).
4. Limit uncontrolled eatings to four this week.
5. Make a list of personal inhibitors.

♣Continue to:

1. Record food intake, caloric values, and fat grams daily.

⊗⊗⊗⊗⊗Lesson 4⊗⊗⊗⊗⊗
Make Eating a Pure Experience

✓If you have been able to follow the steps in the previous lessons, you have begun to make lasting changes in your eating. You should be noticing the following changes in your habits:

✓1. Limiting food intake to three meals and one PCE per day.

✓2. Planning when and where to eat your three meals.

✓3. Using inhibitors to interrupt uncontrolled eating.

✓4. Staying within a reasonable calorie limit.

✓If you are doing these things, you are making excellent progress. These changes are behind you now. Although it may take effort to do these behaviors, as you repeat them they will become a part of your lifestyle that will be performed effortlessly.

✓The important thing is that you are on your way to making lasting changes in your eating. You may begin to notice a feeling of confidence as you gain greater self-control over your eating.

★ Stimulus Control ★

★To expand your control of various stimuli and situations, you will add three new tasks based on the principle of stimulus control. You are already planning and controlling when and where you eat. Now you are going to identify certain areas as food areas. These areas are places where food is stored or eaten and include dining rooms, kitchens, cafeterias, and restaurants.

★Step 1. Place food in the **Food Area**. Make sure that all food in the home is placed in the food area. Ideally, this should be in the kitchen. Let's look at some examples. When Bill began this step, he found that he had peanuts in the living room, crackers in his car, and mints in his desk at work. Similarly, Bob frequently traveled and kept pretzels in his hotel room. Bill moved everything to his kitchen, and he kept his living room free of food. All food in your home should be kept in the food area.

★Step 2. Discontinue noneating activities in the food area. When you are in the food area, you should be either storing food, preparing a meal, or eating. All meals should take place in the food area. When you are out of the home, the food area might be a cafeteria or restaurant. Bill found he always read the paper at the kitchen table. To make sure that the food area was utilized exclusively for meal preparation or eating, Bill read the paper in the living room.

★Step 3. Make eating a "Pure Experience". Besides storing all the food in one area and excluding noneating activities from that area, it is important to make eating a "pure experience." By this we mean that you should engage in no other activity while you eat. For instance, do not watch TV, read the newspaper, or smoke while you are eating. You may talk with family or friends while eating, but don't linger at the table after you finish. While you are eating, you should concentrate on the taste, texture, and smell of food.

♣Summary of New Tasks to Be Done This Week:

1. Place all food in the food storage area.
2. Discontinue noneating activities in the food area.
3. Eat only in the food storage area.
4. Make eating a "pure experience."

♣Continue to:

1. Record food intake, caloric values, fat grams, and uncontrolled eating.
2. Maintain your calorie goal.
3. Limit yourself to three meals and one PCE a day.
4. Schedule the time and place of meals and PCEs.
5. Use inhibitors to prevent uncontrolled eating.

||||||| Lesson 5 |||||||

»»Chaining««

This week's lesson will enhance your ability to control your eating through the behavioral principle of chaining.

»Chaining is an important principle that you will begin to use this week. Behavior has sequences that can be divided into different parts. Each link in a chain prepares for the next one to occur. Let's look at eating as a behavioral chain. The links of an eating chain might consist of (1) walking into the room where food is stored; (2) taking a seat; (3) looking at the food; (4) putting food on your plate; (5) picking up the knife and fork; (6) cutting the food; (7) putting a bite in your mouth; (8) putting down the knife and fork, (9) chewing; and (10) swallowing. In this example, these components are separate; but, in reality we rarely engage in one step at a time. Rather, we may cut food while chewing, or take a bite while putting food on the plate. You may even notice that you take a second bite before swallowing the first. All this in addition to talking, listening, or watching TV! In this lesson, we are suggesting that you begin to accentuate the units of your eating so that it becomes a less "automatic" process. By separating the links of eating, you can have greater personal control over your eating.

»***Eating Deliberately***. This week you should attempt to eat in a more deliberate fashion than you are used to doing. You can begin looking at your eating at each meal and performing one response at a time. For example, if you are eating food that requires cutting, cut a small piece, put the knife down, place the food in your mouth, put the fork down, begin chewing, and then swallow. Use swallowing as the cue for picking up your knife and fork to cut another piece. While chewing, you should not be cutting another piece. When possible, apply this deliberate practice to all foods and eating situations.

»If you are the type of person who eats quickly, **chaining** should at least double the time it takes to eat a meal. This is important because the messages from your stomach about "fullness" are delayed about 15 to 20 minutes from the time you first begin to eat. Slowing down the meal limits the amount of food that you have eaten by the time you feel full. This will help you to avoid overeating.

♣Summary of New Tasks to be Done This Week:

1. Use the principle of **chaining** to help decrease food intake during your meals.

♣Continue to:

1. Place all food in the food storage area.
2. Discontinue noneating activities in the food area
3. Eat only in the food area.
4. Limit yourself to 3 meals.
5. Limit UCE to 3 per week
6. Use Inhibitors to prevent

⊛⊛⊛⊛⊛ Lesson 6⊛⊛⊛⊛⊛
♦♦⌚Time-outs⌚♦♦

This week's lesson will enhance your ability to control your eating through the behavioral principle of Time-Out.

♦Time-Out♦

➢ ***Taking a time-out***. To slow down your meal even further, take a two minute time-out from eating in the middle of your meal. There should be no eating during this period. Use this time to concentrate of how full you are feeling. As you approach the end of your meal, your desire to eat should be considerably decreased. If you feel full after the time-out period, stop eating even if some food is still left on your plate. Remember, the eating behavior of normal weight people is more closely related to the state of their stomach than the state of their plate. Chaining and time-outs will enable you to become more aware of feelings of "hunger" as you start to eat and of "fullness" as you reach the end of your meal.

♣Summary of New Tasks:

1. Take a **two-minute-time out** in the middle of your meal. Concentrate on the feelings of fullness in your stomach.

♣Continue to:

1. Place all food in the food storage area.
2. Discontinue noneating activities in the food area.
3. Eat only in the food area.
4. Make eating a "pure experience."
5. Record your food intake, caloric values, and fat exchanges in your notebook.
6. Limit yourself to three meals and one PCE per day.
7. Limit your uncontrolled eating (UCEs) to **3** per week.
8. Use inhibitors to prevent uncontrolled eating.

▽▽▽▽▽ Lesson 7 ▽▽▽▽▽

♫♫Reinforcement♫♫

Reinforcement

♫You are in this program to gain the reinforcements of weight loss, which include better health and feelings of well-being. Reinforcers, both mental and nonmental, can help to keep you on track in your weight loss efforts. You will be reinforced by the positive comments you get from others. However, in this lesson we will discuss rewards that you can give yourself. ♪

♫Daily Reward. At the end of each day review your progress by using the Reward Sheet provided in this lesson. Points are awarded for how well you do each task. Review your progress each night and compute the number of points you have received. If you earn between 7 and 10 points a day, you are making great progress. If you receive between 4 and 6 points you can feel good about your efforts, but should recognize that you can do better. This will spur you on. If you received fewer than 4 points, review your eating behavior carefully, so that you will earn a higher score the next day.♪

♫Weekly Reward. The second type of reward you can use is a weekly reinforcer that is something that you like. Sometimes, not doing something you enjoy until you have earned it can dramatically increase your adherence to a goal you have set. For example, let's suppose going to a movie is a desirable activity for you. If you decide you will not go to a movie on the weekend unless you have earned a certain number of points, you are more likely to earn those points.

Reward Yourself

♫Make a list of Reinforcers. Reinforcers or rewards are types of support that you can use to pay yourself for changes in your eating habits. What you are doing is rewarding yourself for good eating. Nonmental reinforcers must be activities or things you enjoy and should be unrelated to eating. Suppose you like reading or going to the movies. List them as reinforcers. Also jot down activities such as bowling that you enjoy but have not done for years. Other reinforcers may be going to a ball game, seeing a play, or buying a book or an article of clothing. Mental reinforcers are positive statements that reward you for a job well done. You could tell yourself "It is great that I took the time to exercise today" or "I

did a really good job of limiting my eating at that party." Make a list of at least 10 reinforcers (5 mental, 5 nonmental) you would enjoy a great deal.

Jack's Reinforcers:

- Go to the movies
- Purchase new flies for fishing
- Buy a new shirt
- Read a book
- Work in a workshop
- Visit art museums
- Attend a play
- Go to the store
- Play cards
- Go away for the weekend

Both **inhibitors** and **rewards** will be used to increase desirable eating behaviors. Inhibitors will help prevent unwanted eating and reinforcers will reward good eating habits. This form of control is referred to as self-management. It involves changing your behavior and your environment to achieve your goals. In this case, our goal is better eating behavior which will lead to weight loss and better health.

♣Summary of New Tasks to Be Done This Week:

1. Make a list of reinforcers and complete the reinforcement worksheet.
2. REWARD YOURSELF for meeting your personal goals.

♣Continue:

1. Place all food in the food storage area.
2. Eat only in the food storage area and make eating a "pure experience."
3. Record food intake, caloric values, and fat grams in your notebook.
4. Limit yourself to three meals and one PCE a day.
5. Record uncontrolled eating in your notebook.
6. Use inhibitors to prevent uncontrolled eating.
7. Maintain your calorie goal.

Keep up the self-monitoring!

☞Reward Sheet☜

☺1. **Did I record all of my food intake today?**
Yes = 2 points
No = 0 points

☺2. **Did I stay within my daily calorie goal?**
Within 50 calories of goal = 2 points
Within 200 calories of goal = 1 point
More than 200 calories above goal = 0 points

☺3. **Did I have any UCE's today?**
No UCE's = 2 points
1 UCE = 1 point
More than one UCE = 0 points

☺4. **Did I eat only in the food area (e.g. kitchen, cafeteria, restaurant)?**
All meals = 2 points
2 meals = 1 point
Fewer than 2 meals = 0 points

☺5. **Did I make eating a pure experience by not engaging in any other activity while eating?**
All meals = 2 points
2 meals = 1 point
Fewer than 2 meals = 0 points

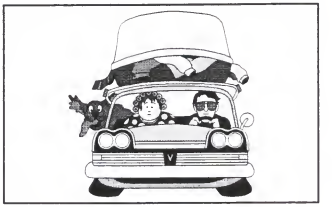
☺6. **Did I use the principle of chaining to slow my pace of eating?**
All meals = 2 points
2 meals = 1 point
Fewer than 2 meals = 0 points

☺7. **Did I take a two minute time-out during my meals today?**
All meals = 2 points
2 meals = 1 point
Fewer than 2 meals = 0 points

Lesson 8

⌂Alterations in Your Environment: The Importance of Planning⌂

♫Most people have a daily routine which includes both work and leisure activities. At this point, the weight loss program should be starting to become a part of your daily routine. However, it is helpful to anticipate what happens when your schedule is disrupted. All of us have unexpected visitors, become sick, or take on extra workloads.



♫At times, these pressures may make you feel like letting the program take a back seat. Don't let this happen. Changes in your schedule do not have to mean stopping the program. Even if you are ill, you can still follow good eating habits. If you are going to be away, changes in eating can be merged into your travel schedule.

♫For example, Matt lives alone and he found following the program at home to be relatively simple. However, occasional visits with his family were difficult. His mother always served rich pastries when he was at their home. In addition, Matt's father liked to take everyone out to eat at restaurants frequently. Matt was faced with a hard choice. He did not want to stop visiting his family until weight was no longer a problem, but he also did not want to eat to please his family. Matt solved his problem by telling his family about the program. During his family's next visits, eating seemed less pressured and everyone seemed to help Matt rather than hinder him.

♫**It is important to anticipate and prepare for both scheduled and unscheduled changes in your daily routine**. Managing your environment and the circumstances under which you eat may be hard at times but, as with Matt, it is not an impossible task.

♣Summary of New Tasks to Be Done This Week:

1. Preplan meals during hectic times. Don't let the program take a back seat.

♣Continue to:

1. Discontinue noneating activities in the food area.
2. Eat only in the food storage area, and make eating a "pure experience."
3. Record food intake, caloric values, and fat grams in your notebook.

⊛⊛⊛⊛⊛ ☞ Lesson 9 ☜ ⊛⊛⊛⊛⊛

⊙⊙⊙Impulse Control: Saying 'No' to Yourself⊙⊙⊙

⊙During the last several weeks, you have achieved a great deal of control over your eating. You have learned to slow your eating, to use inhibitors, and to pre-plan. Here are some new ways to help you prevent impulse eating.

⊙Make food less visible. Remove all food from candy dishes, cookie jars, etc. Make sure that all food in the kitchen is put away and not left on counter tops.

When storing food in the refrigerator, wrap it in⊙Aluminum foil (not plastic wrap), or put it in opaque containers. Food will be less visible, and therefore less tempting when you open the refrigerator.

If you have snack foods in the house, store them in ⊙Inaccessible places, such as shelves or behind other groceries. This makes it less likely that you will impulsively grab snack foods from your open cupboards.

⊙Extend the eating chain by buying foods that require some preparation. If you have to spend a lot of time preparing food, you are less likely to have a UCE. For example, Joan lived alone and did not take the time after work to cook an evening meal. Instead, she had a supply of coldcuts, and had a sandwich for dinner. However, because sandwiches are so easy to make, Joan made several each evening. She tried several inhibitors to no avail. Finally, she stopped buying coldcuts and began preparing hot meals for dinner. Because of the absence of readily available foods, her evening UCE's dropped to zero.

⊙Go grocery shopping on a full stomach. Preplan by preparing a shopping list. Write down the amount and brands you need. Only buy what is on your list. These steps will prevent impulsive buying at the store. If you don't buy items that tempt you, you won't be tempted by them at home!

⊙If you must buy snack foods, choose some that are appealing to your family but not to you. Don't fool yourself into thinking that you are buying snacks for family members when you know you will be eating some yourself. Mrs. Thomas babysat six-year old twins. She always bought chocolate chip cookies because "the kids love them." However, when she added up the number of cookies she ate, Mrs. Thomas realized that she was eating most of the cookies herself.

She began buying oatmeal cookies, which she did not like. As a result, she greatly reduced her episodes of UCE's.

◎Avoid convenience or junk foods. At parties or on holidays, eat only special foods. Avoid foods such as nuts, chips, and dips that you can eat any time. Make the most of your calories by eating special foods that you rarely have the opportunity to eat.

◎Before you go to a special event have a healthful low calorie PCE such as carrots or celery. Then, you won't feel starved when you arrive at the gathering and you will ill be less likely to overeat.

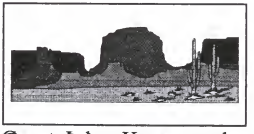
In order to lengthen the eating chain, begin to ◎Pause briefly after each bite. Each pause should be approximately five seconds long and should enhance your awareness of stomach fullness.

♣Summary of New Steps to be Done this Week:

1. Use the tips to prevent and control impulsive eating.
2. Complete the "Steps to Control Impulsive Eating" checklist on the next page.
3. Further lengthen the eating chain of behaviors by pausing for five seconds after each bite.

♣Continue to:

1. Record food intake and calories in your notebook.
2. Limit yourself to three meals and one PCE.
3. Use inhibitors to prevent uncontrolled eating.
4. Maintain good stimulus control -- keep all foods and eating in the food area, make eating a pure experience, and make your eating area distinctive.
5. Chain and take a time-out.
6. Reward yourself.



Great Job. Keep up the good work!!

Steps to Control Impulsive Eating

Place a check next to each item that you successfully accomplish during the week. If necessary, you may put NA for not applicable (e.g., if you did not attend any special occasions this week, you may put NA for numbers 7 and 8).

_____ 1. Make food less visible (put all food in kitchen cabinets or pantry).

_____ 2. Store refrigerated foods in aluminum foil or opaque containers.

_____ 3. Store snack foods in inaccessible places (e.g., on upper shelves).

_____ 4. Buy foods that require some preparation time.

_____ 5. Go grocery shopping on a full stomach and pre-plan your list.

_____ 6. If you must buy snack foods, choose some that are appealing to your family but not to you.

_____ 7. At parties or on holidays, eat only special foods that you seldom have the opportunity to eat.

_____ 8. Before you go to a special event, have a healthful low calorie PCE.

_____ 9. In order to lengthen the eating chain, pause briefly for about five seconds after each bite.

_____ 10. If you feel the urge to have a UCE, try distracting yourself with an inhibitor first.

_____ 11. If you experience the urge to eat, wait at least ten minutes before you eat something.

_____ 12. If you have a UCE, choose a low-calorie food.

_____ 13. If you do have a UCE, take the smallest possible amount of food. If you go back for more, again take the smallest quantity possible.

_____ 14. If you have a UCE, make it a "pure experience." Eat slowly, put the food down between bites, and concentrate on the taste of the food.

_____ 15. Consider anything that you have eaten to be water under the bridge, and return to your eating plan.

Nutrition: Increasing Your Awareness

In the past weeks you have become skilled at keeping track of the types of food you eat. While calories are important, the content of your diet is also important. When you were eating more calories, you probably obtained the nutrients your body needed without thinking about it. Now that you are eating less, you will need to watch your diet carefully to make sure that it is well-balanced.

Nutrition plays a bigger role in your overall well-being than you might think. Overeating or under eating can put you at risk for many diseases. Obesity has been linked to coronary heart disease, stroke, and some types of cancer. The Surgeon General's Report recommends we follow these suggestions below.

1. **Reduce consumption of fat and cholesterol to 30% of our diet.**
2. **Achieve and maintain a healthy body weight.**
3. **Increase our consumption of carbohydrates and fiber.**
4. **Reduce sodium and sugar intake.**

Food provides us with nutrients which are essential for energy and for building and repairing the body. The body's energy is supplied by three types of nutrients: protein, carbohydrate, and fat. In addition, minerals, vitamins, and water are also needed for life. We will now describe the role played by each of these nutrients.

Protein is the basic structural substance of each cell in the body. It provides structure to bones, skin, muscle fibers, and many tissues. It is used to make the enzymes and hormones that regulate chemical reactions in our bodies. Specialized proteins are also present in blood in the form of clotting agents and oxygen-carrying molecules. Proteins are made of subunits called amino acids. Nine of the approximately 20 amino acids can't be made in the body. These 9 are called essential amino acids since they must be in the diet.

Proteins containing the essential amino acids are called complete proteins; others are called incomplete proteins. Animal proteins such as those found in eggs, milk, cheese, meat, fish, and poultry are examples of complete proteins. Meeting the daily protein requirement is easy to do since protein is found in almost every food except for fat. It is important not to exceed your protein requirement since the body converts the additional calories from protein into fat. Daily, your diet should contain about 15-20 percent protein. The protein requirement for adults is 0.8 multiplied by every Kg of body weight. A 150 pound man would need about 68g per day.

Carbohydrates provide the body with energy, especially for activities. Carbohydrates can be broken down into two categories: complex carbohydrates

(starches) and simple sugars. A healthy man eating 2000 calories daily should consume about 1000 calories or 250g of carbohydrates. Complex carbohydrate foods are usually nutrient-rich. This means that they are good sources of vitamins and minerals needed by the body. Complex carbohydrates include potatoes, beans, peas, grains (e.g. wheat, oats, corn and rice), flour macaroni, bread and cereal. Most of the carbohydrates in your diet should come from this group. Simple sugars include sweets, candy, cake, jam, jellies, table sugar, honey, molasses and syrups. These should be used sparingly because they contain few nutrients other than calories.

Fat is an essential nutrient needed daily. One gram of fat has more than twice as many calories as one gram of carbohydrate or protein. Besides being an important part of cell structure, fat protects vital parts of the body, provides energy, and carries fat soluble vitamins. Common sources of fat in the diet are meats, butter, margarine, shortening, lard, oil, cream, cheese, mayonnaise, nuts, milk, eggs, and chocolate. There are two types of fat: saturated and unsaturated. Saturated fats are those of animal origin. They include meat and dairy products like whole milk, cheese, and butter. Also included in this group are palm and coconut oil. Saturated fats are usually solid at room temperature and should be used sparingly because they raise blood cholesterol levels. Unsaturated fats are derived from plant sources and are usually liquid at room temperature. Unsaturated fats are found in peanut, olive, corn, soybean, cottonseed and safflower oils. These fats have not been linked to increases in serum blood cholesterol. Dietitians and physicians recommend that you reduce your total fat consumption to 30% of your daily intake with saturated fat composing less than 10% of this total. Current research indicates that a high level of dietary fat is a risk factor for a number of diseases including heart disease and cancer. Since obesity is itself a risk factor, being overweight and consuming high levels of dietary fat may significantly increase the risk of developing these diseases.

Before you can begin to make changes in the fat content of your diet, it is important to be able to identify the forms that this nutrient takes. Simply eliminating butter and carefully trimming meats before they are cooked will cut only some of the fat that most people eat. Fat that is added in the forms of oils, butter or mayonnaise are probably the easiest to find. There are others that may be less apparent. Meats that are marbled with fat are more tasty and tender because of the fat that runs through them. Most people identify eggs as high cholesterol foods, but many people do not realize that most cheeses also fall into this category. Most luncheon meats are very high in fat and some cold cuts, such as salami, contain visible fat. However, others such as bologna and liverwurst also contain large amounts of fat that are processed into the meat. Other foods to be wary of are starches made with fat, such as biscuits, chow mein noodles, corn bread, many crackers, french fries, muffins, pancakes and stuffing.

Cholesterol is a fatty-like substance (not a fat) found only in animal products like egg yolks, liver, and dairy products. Although cholesterol has been implicated in development of atherosclerosis (hardening of the arteries), it is necessary for many

functions in the body. For example, cholesterol is needed to form the bile acids needed for fat digestion. Cholesterol is found in all body cells, especially in the brain and nervous tissue. What many people don't realize is that the human body makes cholesterol. Health problems can result from the fat and cholesterol content of your diet.

Many **minerals** are required by the body to give strength to body tissues and to assist with numerous vital functions. Calcium, iron, phosphorous and potassium are among those that are important to the body. **Calcium** is the most abundant mineral in the body and 99% is found in the bones and teeth. Calcium has many functions including maintaining the skeletal tissue, blood clotting, and muscular contraction and relaxation. The requirements for calcium increase during adolescence, pregnancy and the post-menopausal years. Women are at greatest risk for osteoporosis and calcium helps slow bone loss. Good sources of calcium are dairy products, eggs, green leafy vegetables, legumes, nuts and whole grains. **Phosphorus**, another important mineral, is known as calcium's "metabolic twin." Phosphorus combines with calcium to build strong teeth and bones. It is also crucial for functioning of muscles and building and repairing tissues. Food sources of phosphorus include milk, milk products and lean meats. **Iron** is a key component of hemoglobin in the blood. Iron is needed to transports oxygen to the cells for respiration. Requirements for iron increase during pregnancy and the child-bearing years. Food sources include organ meats, liver, seafood, whole grains, legumes, and green leafy vegetables. **Sodium** and **potassium** are minerals that play a key role in regulating fluid balance. These elements, called electrolytes, are present mainly in the fluids inside and surrounding the cells, and they are essential for proper transmission of nerve impulses. Sodium is present in all living matter such as meats, poultry, fish and vegetables. For those who are sodium-sensitive, table salt is an easily controlled source of sodium. Frequently, sodium is added in the processing of food as a preservative, stabilizer, or additive. Many foods that you might not initially think of as containing sodium (such as breakfast cereals) use this mineral as an ingredient to enhance the flavor of these products. Although there is no defined sodium requirement, it is suggested adults limit intake to **1-2 teaspoons daily**. As a general rule, eating balanced meals that consist of the six basic foods will provide you with your daily requirement.

Vitamins are organic substances needed in small amounts by the body. They are essential for the proper functioning of muscles and nerves; they play a role in providing energy for the cells, and they promote growth of body tissues. The cells of the body cannot form vitamins so they must be provided by the food you eat. Fat-soluble vitamins (A, D, E, K) are retained within the body and stored in fat, whereas the water-soluble vitamins are not. Vitamin intakes that are above the requirements may harm your health. All the required vitamins can be found in a well-rounded diet. Only in rare cases do healthy people who eat well-balanced meals require vitamin supplements.

Lesson 10

Becoming an Informed Consumer

Get the Facts

In addition to changes in your eating patterns, you've also become better informed about nutrition. However, good nutrition begins in the supermarket, where you make the choices about the foods you will eat. When you're in the supermarket trying to decide what to buy, use the **nutrition and ingredient labels** to make informed choices. This lesson will help you to interpret these labels in order to better control the level of saturated fats, cholesterol, and calories in your diet.

The Food and Drug Administration (FDA) has recently developed food labels that will help consumers understand labels better. Some of the information will include:

Standardized serving sizes to make it easier to compares brands.
More information on fat, including how many saturated fat grams.
Fiber and sugar, which will be listed under carbohydrate.
Percent daily value based on a 2,000 calorie diet.

Similar to the old labels, the most recent food labels do list ingredients in order by weight. The item in the greatest amount is listed first; the item in the least amount is listed last.

Why doesn't every package have this information?

You will find that not all foods are labeled, although, now with the new laws, most foods must be. The Food and Drug Administration requires nutrition labeling for:

1. Food to which nutrients have been added.
2. Foods promoted with specific nutrition claims like "twice as much Vitamin C" or "half the fat."
3. Foods for special dietary use.

The only foods that do not have to be labeled in the supermarket are fresh fruit, fresh vegetables, raw meat, poultry, and fish. Other foods exempt from these rules include food served for immediate consumption (such as in restaurants and cafeterias), food produced by small businesses, food in small packages, and food shipped in bulk.

What about Flavors and Colors?

▬U.S.D.A. guidelines specify that all flavors must be labeled as artificial or natural. Added colors from any source (vegetable, animal, mineral, or other) must be listed as "artificial colors."

▬As everyone is well aware, saturated fats raise your blood cholesterol and are implicated in coronary artery disease. Beef, pork, butter, cream, ice cream, whole milk, and cheese are all significant sources of saturated fats. To reduce the amount of saturated fat in the diet, choose lean meats, fish and poultry (without skin), and use lowfat or skim dairy products. It is important to remember that fruits, grains, and vegetables contain very little fat of any kind.

▬Polyunsaturated fats lower your blood cholesterol. As we have discussed, these fats are found in liquid vegetable oils, such as safflower, sunflower, corn, soybean, sesame, and cottonseed oils. You may also be aware that many packaged foods contain hydrogenated or partially hydrogenated oils. What this means is that hydrogen has been added to polyunsaturated vegetable oils to harden the fat. This is frequently done to give shape to a product, such as forming margarine into stick form. However, complete hydrogenation completely saturates the fat; partial hydrogenation lowers the proportion of polyunsaturated fats that an oil contains.

♣New Steps to be Completed this Week:

1. Take a look at the labeling of foods you routinely use that contain fats. Try to determine whether the fats used in these products are saturated or unsaturated.

♣Continue to:

1. Place all food in the food storage area.
2. Discontinue noneating activities in the food area.
3. Eat only in the food storage area.
4. Make eating a "pure experience."
5. Record food intake, caloric values, and fat grams in your notebook.
6. Limit yourself to three meals and one PCE a day.
7. Record uncontrolled eating in your notebook.
8. Use inhibitors to prevent uncontrolled eating.
9. Maintain your calorie goal.
10. Use the tips in Lesson 9 to control impulse eating.

☞ Lesson 11 ☜

Controlling Holiday Eating

■When we overeat or have uncontrolled eatings, we are usually responding to psychological, not physiological hunger. Environmental stimuli can trigger the feelings of hunger that lead to UCEs. These hunger cues may be linked to specific times and situations or may be reactions to stress or other emotions. You may find that if you leave a situation or don't respond to the cues by eating the feeling of hunger will disappear.

Many Holidays involve special foods... Be Ready

■Let's look at an example. Imagine yourself walking down the street thinking about the coming weekend. Suddenly, you pass a bakery shop. The sight of fresh pastries in the window and the smell are powerful cues. They cause you to react with a sensation of hunger even though seconds earlier you had no thoughts of food or hunger. If you leave the situation, the hunger will fade. The reason for this is that the feeling of hunger was prompted by the situation and not by your body's need for food. Thus, avoiding situations that prompt psychological feelings of hunger is an important way to prevent UCEs.

■Snacking or uncontrolled eating may not be a problem for you. Nevertheless, two situations frequently cause UCEs. The first is during holidays or vacations, where the environment is filled with food. The second is the type of "uncontrolled" eating that occurs during a meal. For example, taking that extra helping or second dessert. It is important that you train yourself to eat only what you need and to leave the rest.

Preplanning: How to Head Off UCEs at the Pass

■One good method to control eating at holidays and on vacations is to make plans. You will be more likely to limit your food intake if you plan ahead to eat specific foods at certain times and places. It's much more effective than saying to yourself, "I'm going to be careful about what I eat."

■When you preplan, you decide ahead of time when and what to eat. For example, you might decide that after lunch you will not eat until dinner. If someone offers you a snack in the afternoon, you will be more likely to turn it down if you have planned in advance not to eat at that time. This is especially true when all your meals and PCEs are planned. If that extra doughnut isn't on the plan, it is less tempting.

■Another example would be preplanning for dinner at a restaurant. The idea would be to think ahead about the dinner, so you will know what you are going to eat when you get there. If you had planned for one beverage, a fish entree, green salad, and fruit for dessert, you would stand a better chance of not going along with the crowd and having three beverages, French onion soup, Beef Wellington, and chocolate mousse. If you enter the restaurant with a strategy, you will be less tempted by high-calorie foods.

■Many special occasions (e.g., birthdays, holidays) are associated with certain foods. In addition to being nicely prepared, food on these occasions may have strong emotional meaning for you. You may feel deprived if you limit yourself while others are eating. One way to handle this situation is by preplanning what you will be eating.

♣Summary of the Steps To Be Done This Week:

1. Set aside time to preplan your daily food intake.
2. Write down your food plan in your food logs.
3. Preplan at least one meal per day, such as dinner.
4. Use preplanning to develop strategies for special occasions.

♣Continue to:

1. Record food intake, caloric values, and fat grams in your notebook. Limit yourself to three meals and one PCE a day.
2. Use inhibitors to prevent uncontrolled eating.
3. Maintain good stimulus control by eating only in the food area.
4. Monitor your behavior for your daily and weekly reward.
5. Continue to chain and take time-outs.
6. Use the tips in Lesson 9 to control impulse eating.

!!!!!!!!!!!!! Lesson 12 !!!!!!!!!!!!!

⊕Asserting Yourself in Social Situations⊕

Eating in the Presence of Others

⊕There are many situations that may increase your tendency to eat. While it is possible to avoid some of these situations, it might be socially awkward to do so. We all attend parties and have parents and friends who fix our favorite foods. Previously learned strategies will allow you to engage in social activities without letting food be the focus of your enjoyment. Keep in mind that you are not at a social activity just to eat, but to enjoy the company of others.

⊕Preplanning can help you to participate comfortably in many special occasions. Ruth and Bob were often faced with conflicts caused by their busy schedules. But, instead of avoiding the situation or not eating anything at these parties, they used pre-planning to help them control the situation. On the day of a party, they would eat a late breakfast and then lunch at two or three o'clock. The food served at the party then became their third meal.

⊕It is important to use these strategies, but there are other problems you may encounter. It is not uncommon for party givers to insist that you eat more than you had planned. You may have heard statements such as "I made it just for you," or "Oh, please at least try one." These statements are difficult to resist when the food is attractively prepared. However, there is something that you can do to feel more in control of these situations.

Asserting Yourself in Food-Related Situations

⊕Although you may have no difficulty speaking up for your rights in a variety of settings, even the most assertive individuals can have difficulty expressing themselves when it comes to food. Examples of unassertiveness in food-related situations include accepting unwanted food from a persistent host, not requesting that restaurant food be cooked the way you want it, or failing to pass up unwanted second portions.

⊕Let's look at some examples. After starting the program, Ron was reluctant to attend social gatherings for fear that he would overeat. He felt that he could not lose weight and attend parties at the same time. However, he recognized that limiting his social activities would produce the **"overweight paradox."** That is, if he found himself staying home with nothing to do, he would be more likely to eat.

!!Five Components of an Assertive Response!! in Food-Related Situations

⊕**First**, your **tone of voice and facial expression** must convey a firm conviction. Your voice should not waver and you should not convey that there is doubt in your mind. This will only lead to more pressure to eat.

⊕**Second**, **eye contact** is often thought to indicate sincerity. Look straight at your host when stating your desires.

⊕**Third**, **express your desires and interests clearly**. If you wish to refuse food, don't say "I really shouldn't," but say a firm "No, thank you!" Being unclear about whether you want food leaves doubt in your host's mind. Similarly, if a waiter hears "if it's not too much bother, could you...," he is likely to underestimate the importance of your request. State clearly what you want the waiter to do, such as "I would like you to...," or, "this is not the way I asked you to prepare this, please take it back."

⊕ **Fourth**, **compliment the host**. This will be helpful if you are concerned that failure to eat the food may offend your host. The compliment should consist of a statement describing the attractiveness of the food and its taste or smell. In addition, you may wish to remark that you are having a good time. This is often enough to halt efforts to get you to eat.

Don't be afraid to make requests!

⊕The **fifth** component of an assertive response is **suggesting an alternative**. As you will recognize, many people are not satisfied until they have given you something. This can simply be done by asking for a cup of tea, coffee, or other low-calorie drink.

⊕Review your eating in social situations. Do you have difficulty refusing food in certain situations? Can you resist the offers of others? Do you ever find yourself eating food that you did not really want? We suggest that you practice some responses for situations that usually confront you on the following page (please see Table 1). This will help you get the feel of what it's like to be appropriately assertive.

Limiting Servings⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕⊕

This week we will introduce one additional technique to assist you in controlling your eating. A highly effective way of reducing calories is to limit your intake to one serving at every meal. Many of you may already be doing this. If you are not, cutting out seconds may be difficult at first. But using strategies you have already learned (chaining and time-outs) and savoring your food (pure experience) will help you to accomplish this step.

Table 1.

SITUATION	RESPONSE

♣Summary of New Steps to be Done This Week:

1. Practice the 5 steps outlined above.
2. Fill out "Situation-Response" form.
3. Plan to have only one serving of each food at every meal.

♣Continue to:

1. Record food intake, calories, and fat grams in your notebook.
2. Limit yourself to three meals and one PCE a day.
3. Use inhibitors to prevent uncontrolled eating.
4. Maintain good stimulus control and make eating a pure experience.
5. Continue to chain and take a timeout at each meal.
6. Preplan at least one meal each day.
7. Continue your daily and weekly rewards.
8. Maintain your calorie goal.
9. Use the tips in Lesson 9 to control impulse eating.

♦♦♦♦♦ Lesson 13 ♦♦♦♦♦

♦Problem Solving♦

♦♦♦♦♦♦♦♦♦♦♦♦♦♦♦♦♦♦♦

You have probably become very skilled in applying various weight loss techniques to challenging situations when you overeat. At this point, however, you may have noticed more persistent eating behaviors that are making it more difficult to achieve your weight loss goals.

Take a Systematic Approach

To change persistent eating behaviors, it is often helpful to use problem solving. By using an organized problem solving strategy, useful interventions can be identified. Consider the following example. Brian noticed that he was having difficulty controlling his eating during and after dinner. Initially, Brian had tried to address this problem by using chaining and time-outs while eating dinner, by planning activities after dinner, and planning a PCE two hours after dinner. However, Brian noticed that these techniques had only a small effect on his eating patterns during and after dinner. In attempts to address this problem, Brian planned to eat more calories earlier in the day to see if this would help curb his nightly cravings. This strategy was somewhat effective for Brian in that he had fewer problems with nighttime eating. However, the problem was not solved. Brian decided to look more closely at the interventions he had already tried. With respect to Brian's activities, he realized that the activities he had planned were always in his home, making it easy for him to get a snack. Therefore, Brian decided to engage in outdoor activities after dinner. By combining these two strategies Brian found that his difficulty controlling his eating was no longer a problem. By systematically assessing the problem, Brian was able to change his eating behavior.

♦Step 1. Identify the Problem.♦

In this step you will want to describe the problem that is prompting overeating. An example might be "I tend to eat when I am bored or depressed."

♦Step 2. List the Alternatives/Options.♦

Having identified a problem, make a list of *all* the strategies that come to mind. This is referred to as "brainstorming." What is great about brainstorming is that a thorough list can be created. At this point, postpone testing each possible strategy until you have completed your list. For example, "I will leave the house when I am bored or depressed." " I will walk the dog every time I am down."

♦Step 3. Evaluate the Alternatives Listed.♦

Now you will rate each potential intervention according to some rating scheme. For example, you may decide to use a 5-point scale such as the following:

5 = a potentially greatly beneficial alternative
4 = a very good alternative with some promise
3 = a good alternative
2 = an alternative that may not prove useful
1 = an alternative with little use or value

♦Step 4. Choose one or more of the alternatives to try.♦

At this point you will choose the alternative with the highest rating to implement first. You may wish to try only one intervention at a time (this method can make it easier to determine if an intervention is effective), or you may implement several strategies. By implementing several strategies at once, you will have a back-up ready if the first intervention is ineffective or not possible.

♦Step 5. Put a plan into action♦

Now it's time to act. Before you implement a strategy, write a plan telling how, when, where, and how often you will implement the strategy. For example: "When I feel like eating because I am bored or depressed, I will first try to go for a walk or ride my bike. If this isn't possible, I will telephone a friend."

♦Step 6. Evaluate progress.♦

Select a measure of effectiveness of the implemented strategies. For example, you may choose to use a reduction in caloric intake and weight loss as you measures of effectiveness. For example, "I will know that I have been successful at problem solving when my daily caloric intake is below 1,500 calories for one week and I lose 1 pound."

♦Step 7. If unsuccessful, begin again.♦

If you do not see success, review each step, make revisions, and write a new plan. Repeat this process as often as necessary.

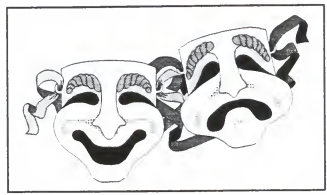
♣Summary of new Steps for this Week:

1. Identify persistent eating behaviors/patterns that are making it difficult to reach your weight loss goals.
2. Use the seven problem solving steps.

♣Continue to:

1. Record all food intake, caloric values, fat grams, and uncontrolled eating in your notebook.
2. Maintain your calorie goal.
3. Limit yourself to three meals and one PCE per day.
4. Schedule the time and place of meals and PCEs.
5. Use inhibitors to prevent uncontrolled eating.
6. Use the tips in Lesson 9 to help control impulse eating.

✡✡✡✡ ☞ Lesson 14 ☜✡✡✡✡
Observing and Developing Positive Thoughts


THINK POSITIVELY

✡Like the glass of water that can be seen as half empty or half full, we can focus on our successes, or be worn down by problems.

✡The way we think about things can affect our behavior and the way we think about ourselves. In this lesson we will discuss how you can use your accomplishments to further your goals. We'll begin by reviewing your progress. You have learned many new habits, and you're making lasting changes in your eating. For example, you now limit yourself to three meals and one PCE per day. You also eat few UCE's, and make eating a "pure experience." You've also become aware of the nutritional value of your food. These changes will help you to continue to lose weight. When these habits become established, you will certainly keep your weight down.

✡Negative thoughts can occur in relation to weight loss, uncontrolled eating, or other areas. Each of these represents an important part of the program. It will be important to understand how these thoughts may affect you.

✡Some of the things you tell yourself can be viewed as excuses for not following the program. You might say, "It's a special occasion, so I don't have to follow the program." Such thoughts may not occur as often as they did in the past, but they can still affect your progress. This is because they often precede overeating or irregular eating. It is important to become familiar with these negative thoughts and the role they can play in keeping you from achieving your weight loss goal.

Identifying your Negative Thoughts ✡✡✡✡✡✡✡✡✡✡✡✡✡✡✡✡✡✡

✡The first step in combating negative thoughts is to **observe** them. As we have said, these statements usually occur shortly before you begin to deviate from the program. If you are thinking of stopping your notebook recordings, not chaining, or giving up, you are probably making excuses, or thinking negative thoughts. You may not always be aware of the thoughts behind your actions. For instance, you may be talking

with someone and reach for a piece of food even though you feel full. It is important to begin to label these feelings as thoughts so that you can overcome them.

☼Next, **jot your thoughts down** on paper. This will provide a file of excuses, negative thoughts, and exaggerations that will help you identify problem areas. In addition, be sure to record positive thoughts. When we tell ourselves something often, it can become a **Self-Fulfilling Prophecy**. Your goal is to make more positive statements to yourself. If you've always thought of yourself as a "fat person," work toward having your statements reflect a new perception of yourself as a person who can change.

☼Let's look at an example of what we're talking about. For most of his life, Jack, a 52 year old plumber, viewed himself as "a fat person." Holding onto this idea could drastically impede his progress in the program. After a few weeks, Jack began to change his thoughts and to think of his weight as resulting from his eating. However, following an event about 4 weeks into the program, negative thoughts came back. These thoughts were so powerful that he almost gave up. Jack was at a family gathering with people that he hadn't seen for a while. Although he had lost approximately 7 pounds, no one commented on his weight loss. Jack began to feel that he was not making progress. He told himself: "Nobody has noticed the weight I've lost. This isn't worthwhile -- it's just not going to work."

☼ **Change your idea**. Instead of putting himself down, Jack told himself: "Nobody's noticed the weight I've lost, but I certainly have. I feel better and my clothes feel a little loose. With 5 more pounds, others will notice as well."

☼When the going gets tough, self-defeating thoughts can be expected to occur. To be successful you must persist and engage in a four step process. **This begins with: 1) recognizing the negative statements, 2) labeling them, 3) recognizing how they can limit your success, and 4) develop ideas that will motivate you to follow the program closely.**

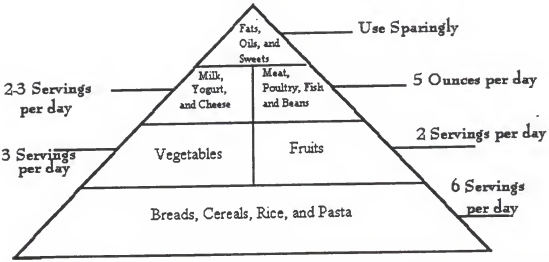
♣Summary of New Steps to be Done This Week:

1. Develop and write out positive thoughts to combat negative thoughts you generate this week.

♣Continue to:

1. Record food intake, calories, and fat grams in your notebook.
2. Limit yourself to three meals and one PCE a day.
3. Use inhibitors to prevent uncontrolled eating.
4. Maintain good stimulus control by keeping all foods and eating in the food area.
5. Chain and take a timeout at each meal.

Lesson 15
The Food Guide Pyramid



☞The Food Guide Pyramid is a dietary guidance system developed by the United States Department of Agriculture. The Pyramid is based upon research on the nutrient content of foods and was developed to help individuals make the best food choices possible.

☞The Pyramid is a general dietary guide that will help you choose what and how much to eat from each food group. Making food choices based upon the Pyramid will help ensure that you eat a variety of foods, get the nutrients you need, and not too much sugar, sodium and alcohol. In addition, using the Pyramid as a guide will help keep your intake of total fat and saturated fat low.

☞The Pyramid has 5 major food groups: Grain, Fruit, Vegetable, Meat, and Milk. Each group provides some nutrients, but not all. Therefore, for good health, you need to eat foods from each group. At the tip of the pyramid are fats, oils, and sweets. These foods provide calories and little else nutritionally. Therefore, you should use them sparingly.

How to Make the Pyramid Work for You

☞The Pyramid shows a range of servings for each of the 5 food groups for a 1,600 calorie diet. This calorie level is approximately 600 calories lower than the recommended level suggested by the National Academy of Sciences for sedentary men which will help assist in weight loss. Approximately 3,500 calories are in 1 pound. Therefore, if you closely following the serving suggestions in your food guide, you will be losing more than 1 pound per week.

What is a Serving?

The amount of food that counts as 1 serving are presented in the following table. If you eat a larger portion, count it more than 1 serving. For example, if you eat 1 cup of pasta, that would be two servings.

Food Guide Pyramid Serving Sizes

Food Group	Suggested Serving Size
Grain (6 servings)	1 slice of bread ½ English muffin or hamburger bun 1 oz. of cereal ½ cup of cooked pasta, rice, grits or cooked cereal 1 tortilla 1 roll 1 muffin
Fruit (2 servings)	3/4 cup of juice ½ cup of raw, canned, or cooked fruit 1 medium apple, banana, orange or pear ½ grapefruit 1/4 cantaloupe
Vegetable (3 servings)	½ cup of raw vegetables 1 cup of raw leafy vegetables ½ cup of cooked vegetable 1 medium potato 3/4 cup of tomato juice
Meat (5 ounces)	5 ounces of cooked lean meat, poultry, or fish 1/2 cup of cooked/dry beans 1 egg 2 Tablespoons of peanut butter
Milk (2-3 servings)	1 cup of milk or yogurt (preferably low fat or nonfat) 1 and ½ to 2 ounces of cheese ½ cup of cottage cheese ½ cup ice milk, ice cream or frozen yogurt (preferably low fat or nonfat)

Food Guide Pyramid Food Choice Chart - Extended

The following chart lists commonly used foods and the serving size and amount of fat in each. This list will give you an idea of foods that are higher and lower in fat.

	Servings	Grams of Fat
Bread Group		
Bread, 1 slice	1	1
Hamburger roll, bagel	2	2
English Muffin	2	2
Tortilla, 1	1	3
Rice, pasta, cooked, ½ cup	1	trace
Breakfast cereal, 1 oz.	1	variable*
Pancakes, 4 inch diameter, 2	2	3
Croissant, 1 large (2 oz.)	2	12
Doughnut, 1 medium (2 oz.)	2	11
Danish, 1 medium (2 oz.)	2	13
Cake, frosted, 1/16 average	1	13
Cookes, 2 medium	1	variable*
Pie, fruit, crust, 1/6 of 8 inch pie	2	19

*Please check product label

Vegetable Group		
Vegetables, cooked, ½ cup	1	trace
Vegetables, leafy, raw, 1 cup	1	trace
Vegatables, nonleafy, raw, chopped, ½ cup	1	trace
Potatoes, scalloped, ½ cup	1	4
Potato salad, ½ cup	1	8
French Fries	1	8

Fruit Group		
Whole fruit, medium apple, orange, banana	1	trace
Fruit, raw or canned, ½ cup	1	trace
Fruit juice, unsweetened, 3/4 cup	1	trace
Avocado	1	8

	Servings	Grams of Fat
Milk, Yogurt, and Cheese Group		
Skim milk, 1 cup	1	trace
Nonfat yogurt, plain, 8 oz.	1	trace
Lowfat milk, 2 percent, 1 cup	1	5
Whole milk, 1 cup	1	8
Chocolate milk, 2 percent, 1 cup	1	5
Lowfat yogurt, plain, 8 oz.	1	4
Lowfat yogurt, fruit, 8 oz.	1	3
Natural cheddar cheese, 1.5 oz.	1	14
Process cheese, 2 oz.	1	18
Mozzarella, part skim, ½ cup	1	7
Ricotta, part skim, ½ cup	1	10
Cottage cheese, 4 percent fat, ½ cup	1/4	5
Ice cream, ½ cup	1/3	7
Ice milk, ½ cup	1/3	3
Frozen yogurt	½	2

Meat, Poultry, Fish, Dry Beans, Eggs, and Nuts Group		
Lean meat, poultry, fish, cooked	3 oz.	6
Groung beef, lean, cooked	3 oz.	16
Chicken, with skin, fried	3 oz.	13
Bologna, 2 slices	1 oz.	16
Egg, 1	1 oz.	5
Dry beans and peas, cooked, ½ cup	1 oz.	trace
Peanut butter, 2 tbsp.	1 oz.	16
Nuts, 1/3 cup	1 oz.	22

Fats, Oils and Sweets		
Butter, Margarine, 1 tsp.	-	4
Mayonnaise, 1 tbsp.	-	11
Salad dressing, 1 tbsp.	-	7
Reduced calorie salad dressing, 1 tbsp.	-	*
Sour cream, 2 tbsp.	-	6
Cream cheese, 1 oz.	-	10
Sugar, jam, jellly, 1 tsp.	-	0
Cola, 12 fluid oz.	-	0

* Please check product label

Lesson 16

Inappropriate and Positive Thoughts about:

♠♠♠♠♠♠Uncontrolled Eating and Snacking♠♠♠♠♠♠

Review the following inappropriate and appropriate thoughts about uncontrolled eating and snacking. By doing so, you will become more aware of how your thoughts can affect your behavior and mood.

Inappropriate	Appropriate
Oh, but this is such a special occasion and I'll only have one.	Well, it may be a special occasion, but then anything can be called a special occasion, and I can't start making exceptions. If I have one, it could lead to another and another, just like in the past. I've had enough of that.
I've been doing really will at losing weight; one eating spree won't hurt.	Yes, it will. Rather than "rewarding" myself for progress by doing something destructive like overeating, I'll go look in the mirror and reward myself with a look at how well I'm doing.
It's impossible for me to resist this dessert -- it's my favorite!	I can eat many foods that I like. But if I eat this now, it will be an uncontrolled eating. I have willpower. I can resist eating this dessert. Maybe I'll have something low in calories instead like frozen yogurt.
I don't feel like exercising today. It has been a rough day and I am too tired.	Even though I may be tired, exercising can make me feel better because I will meet my goal for the day. Exercising can give me some extra energy for the remainder of the day.

●●●●● Lesson 17●●●●●

●●●●Using Positive Thoughts to Counteract Underlying Assumptions●●●●●

●Last week we looked at how statements that we make to ourselves can influence our behavior. As we've looked at these self-statements, we've identified them as excuses or exaggerations.

●This week we want to see whether these negative thoughts reflect underlying attitudes we have about our ability to succeed at weight loss. For example, let's look at a statement many people in this program may have made: "No matter how hard I try to lose weight, I'll always be fat." If this thought keeps recurring, you will attribute your difficulties to an underlying cause over which you have no control. When you gain a pound rather than losing it, you will view that as evidence that your hidden assumption about yourself is really true. Each time this occurs, this negative thought becomes more difficult to eliminate. Instead of looking objectively at the situation, you allow eating more and gaining weight to control your future behavior (continuing to eat more and gain weight). The thought that you will always be fat becomes a self-fulfilling prophecy that can defeat your best efforts.

●As much as you may want to make changes, it is important to be aware that change, even in a positive direction, can be uncomfortable or frightening. It means giving up ways that are familiar and trading them for things that are unknown. Not only will you look at yourself differently when you lose weight, but others around you will also view you differently. You may wonder if people's expectations of you will change, or if they will feel the same way about you. Fear of these unknowns can make your efforts to succeed more difficult.

●One thing that could make change more difficult is that there may be benefits to staying the same weight. Are there any ways in which being overweight makes things easier for you? Does it keep you from getting to all the things you would like to do but fear doing?

●This week we want to look at the hidden benefits that may influence your behavior.

●As you read the following statements, note the degree to which they apply to you, and circle the appropriate word. If a statement is something you used to tell yourself in the past, but no longer use, circle "In the Past."

I tell myself this:	Often	Seldom	Never	Past
If people don't like me the way I am, it's just too bad.	____	____	____	____
For me, losing weight is not simply a matter of following a diet; I have a special problem weight.	____	____	____	____
People might feel uncomfortable with me or not like me if I changed.	____	____	____	____
I'll just regain the weight anyway, no matter how hard I try.	____	____	____	____
Food occupies a lot of my time: if I'm not eating, I'm thinking about whether or not I should eat, or feeling guilty for eating something I think I shouldn't have eaten.	____	____	____	____
As much as I want to lose weight, I am comfortable about being fat. Being fat and occupied with dieting provides an excuse for not getting to all the things I'd do.	____	____	____	____
It won't really make a difference. Being thin is no guarantee of being happy.	____	____	____	____
Losing weight over and over again is bad for your health.	____	____	____	____
If people reject me, it's because of my weight, not because of who I really am.	____	____	____	____
If someone disapproves of my weight, then regaining weight that I've lost, is a perfect way to back at them.	____	____	____	____

Take a close look at any statements which you checked "often." Write them in the space below under Negative Thoughts. Then, develop a Positive Thought to use every time the Negative Thought occurs.

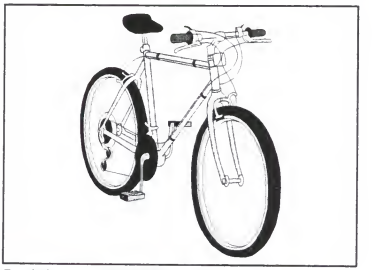
NEGATIVE THOUGHT	POSITIVE THOUGHT
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

♣Summary of Steps to be done this week:

1. Take a look at the ways hidden assumptions or payoffs influence your behavior. Develop and write out a positive thought to combat each negative thought that you have noted.

♣Continue to:

1. Record food intake, calories, and fat grams in your notebook.
2. Limit yourself to three meals and one PCE a day and use rewards.
3. Use inhibitors to prevent uncontrolled eating, and maintain your calorie goal.
4. Maintain good stimulus control, keeping all foods and eating in the food area, making eating a "pure experience," and continuing to eat in a distinctive eating area.
5. Chain and take a time-out at each meal.
6. Use the tips in Lesson 9 to control impulse eating.

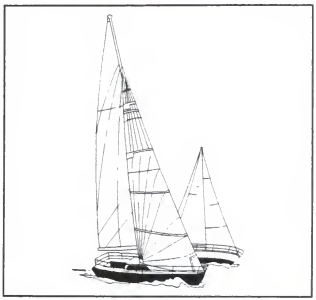


Don't forget to REWARD yourself!

▸▸▸▸▸▸▸▸▸▸ ☞ Lesson 18 ☜ ◂◂◂◂◂◂◂◂

Using Imagery to Help You Reach Your Goal

▸In the past weeks, we have talked about the effects thoughts can have upon your behavior. Negative thoughts can become self-fulfilling prophecies. If you view yourself as someone who will "always be fat," you may have a hard time losing weight. Similarly, if you tell yourself "I can lose weight, but I'll just gain it back again," you may have a difficult time maintaining weight loss.



Imagine a pleasant scene

▸We have discussed a variety of techniques that you can use both to change negative thoughts, and to develop positive thoughts. Positive thoughts can create a self-fulfilling prophecy, and so can positive imagery. Athletes often use imagery to improve their performance. For example, tennis players imagine making a perfect serve: tossing the ball up in the air, reaching back with the racket, hitting the ball, and acing it! As they imagine this, they think through the entire process when everything goes perfectly.

▸To prove to yourself the power of imagery, do a simple exercise. Imagine that you are out for a picnic, and you have put your blanket down on top of an ant hill. Before you know it, ants are everywhere -- on the food, and on you. They are crawling on your arms, and up the legs of your pants. You jump up to shake them off, but you can feel them crawling down your back. As you imagined this you may have felt itchy. Even from the safety of indoors, these thoughts had a powerful effect.

▸You can also use imagery to stimulate positive, enjoyable experiences. For example, you can envision yourself on a hammock with the sun warming your face. You can imagine the soothing sounds of pleasant music, and feel a soft pillow under your head. When you picture this scene, you may begin feeling warm, relaxed, and peaceful.

▸To apply this use of positive imagery to weight loss, imagine yourself 5, 10 or 15 or more pounds thinner. It is important that you pick a goal you can visualize. Imagine what it will feel like when you are that much thinner. Imagine the feeling of comfort and ease that you will experience.

♣Summary of New Steps to be Done This Week:

1. Following your relaxation exercise, use imagery to envision yourself reaching some of your weight loss objectives.

♣Continue to:

1. Record food intake, calories, and fat exchanges in your notebook.
2. Maintain your calorie and exercise goals.
3. Limit yourself to three meals and one PCE a day.
4. Use inhibitors to prevent uncontrolled eating.
5. Use positive thoughts to combat self-defeating negative thinking.
6. Maintain good stimulus control, by keeping all foods and eating in the food area, making eating a pure experience, and eating in your distinctive eating area.
7. Chain and take a time-out at each meal.
8. Preplan at least one meal each day.
9. Monitor for your daily and weekly rewards.
10. Limit yourself to one serving of food at each meal.

Play some relaxing music when stressed.

▼▼▼▼ ☞ Lesson 19 ☜▼▼▼▼

=Assessing Your Progress and Maintaining Your Motivation

▼We are now close to the end of the weekly phase of the program. Therefore, it is important for each of you to accurately assess the amount of personal control you have gained and maintained over your eating. At this time, you may want to ask yourself: How well have I met this challenge? How far do I still have to go? If this were the end of the program, how confident am I that I have incorporated the knowledge and control necessary to make continued decisions regarding my behavior?

▼Rather than simply thinking about these things, we would like you to examine your progress in using the different techniques in the program. Decide which strategies you successfully use, and which strategies you need to work on. Remember, deciding you have succeeded in making a strategy part of your lifestyle doesn't mean you can forget about it! It simply means that you can probably devote less effort to continuing to use that strategy.

▼On the next page, you will find a list of techniques that were introduced in the program to help you change your habits and lose weight. Think about each of the techniques, and check whether you have successfully made that strategy a part of your lifestyle or whether you need to continue to work on mastering that strategy.

▼It is also important at this time to evaluate your motivation to continue to lose weight. MOTIVATION can be defined as a state of readiness to change that may vary from time to time. All of us can relate to having our motivation fluctuate from time to time. This happens to everyone. The good news is that you can do things to maintain your motivation.

▼A description of the process of changing behavior may help you to understand better how to do this. Two psychologists, Prochaska and DiClemente, have conducted many years of research examining how people make lifestyle changes. Subjects have included individuals who want to lose weight, those who want to quit smoking, and those who want to begin exercising. These researchers have broken down the process of behavior change into six stages:

1. PRECONTEMPLATION

In this stage, the individual has no intentions of changing his/her behavior. A person in this stage may either see the disadvantages to changing their behavior as outweighing the advantages. In contrast, a person may be aware of a problem, but is avoiding it.

2. CONTEMPLATION

This is the stage in which a person seriously evaluates the pros and cons of making changes. It is characterized by ambivalence as the person seesaws between the advantages and disadvantages of changing. It is possible to get stuck in this stage for years. A typical

statement from someone in this phase is "Someday soon I'm going to do xxx (e.g., stop smoking)."

3. DETERMINATION

When a person makes a decision to make changes in their behavior, he/she moves into the Determination Stage. Generally, the person has a plan about how to make the changes, such as joining a weight loss program.

4. ACTION

This stage involves doing the behaviors necessary for making a change. One common problem for people in the Action Stage is that they do not put enough time in this stage. For example, people who try to lose 20 pounds in 2 weeks can feel discouraged.

5. MAINTENANCE

The stage involves maintaining behavior changes, with the ultimate goal being that the lifestyle changes become habits or "permanent changes."

6. RELAPSE

It is important to note that one generally does not reach the ultimate goal of permanent change the first time around and one may relapse first. Relapses are a normal part of the process whenever changing a long-standing pattern. When a relapse occurs, you have choices about how to handle it: You can revert back to "Precontemplation" (i.e., denial or avoidance) or jump right back into the process again.

▾The series of stages involved in behavior change highlights the fact that change is not a one-step process. It takes consideration, a decision, actions to make changes, and then efforts to maintain those changes. Over the last 3 months, you have been taking "action" to make important changes in your life related to eating. Now it is time to move into the Maintenance Phase and concentrate on making these changes permanent habits. To help increase your motivation, you can take yourself formally through the "Contemplation Phase" described above. You can do this by examining your reasons for wanting to continue to manage your weight at this time using the Cost-Benefit Analysis Sheet at the end of the lesson.

▾In preparing to begin the maintenance phase of the program, it also is important to evaluate the readiness of your surroundings as well as yourself. This is because your environment (and the people in it) can also influence whether or not you successfully make and maintain lifestyle changes. Things (or people) who interfere with your efforts are called "barriers" to change. Barriers to your continued participation in the program can include a broad range of things, including a busy schedule or frequent dining out. Barriers can also be those mental blocks you might have that can interfere, such as "I don't need to limit my fat intake anymore." Barriers can affect different aspects of your efforts to lose weight, such as reducing your calories and limiting fat intake.

xxxxxxList of Strategies to Assess Progressxxxxxx

	Already Use Successfully	Need to Work On
Record food and calories	_____	_____
Maintain calorie goal	_____	_____
Compute rewards	_____	_____
Give yourself rewards	_____	_____
Eat 3 meals and 1 PCE	_____	_____
Record UCE' s	_____	_____
Use inhibitors	_____	_____
Use positive thoughts to counteract negative ones	_____	_____
Preplan your meals	_____	_____
Eat only in food area	_____	_____
Make eating a "pure experience"	_____	_____
Eat in distinctive eating area	_____	_____
Use chaining	_____	_____
Take a time-out	_____	_____
Have one portion	_____	_____
Use relaxation techniques	_____	_____
Delay response to urges to eat (waiting 10-20 minutes)	_____	_____
Distraction	_____	_____
Other strategies:	_____	_____

ƧYou can prepare yourself better for the next phase of the program by considering what or who may get in the way of your efforts. Think of some of the obstacles that could interfere with your success and write them down as barriers to change. Then generate some ideas for solving them. Planning ahead of time for problems will help to minimize factors that may affect your motivation and your success.

Potential Obstacles **Potential Solutions**

_____

_____

COST-BENEFIT ANALYSIS OF BEHAVIOR CHANGE

CONTINUING TO DO EATING AND EXERCISE BEHAVIORS NEEDED FOR WEIGHT LOSS

- BENEFITS

_____

_____

- COSTS

_____

_____

DISCONTINUING WEIGHT MANAGEMENT EFFORTS

- BENEFITS

_____

_____

- COSTS

_____

_____

BARRIERS TO CHANGE

POTENTIAL PROBLEM _____

SOLUTION _____

POTENTIAL PROBLEM _____

SOLUTION _____

♣Summary of New Steps to be Done This Week:

1. Assess your progress by examining which weight loss strategies you are currently using successfully, and which strategies you would like to work on.
2. Generate a list of obstacles that may interfere with your continued success in the program.
3. Complete the cost-benefit analysis of behavior change worksheet.

♣Continue to:

1. Record food intake, calories, and fat grams in your notebook.
2. Maintain your calorie and exercise goals.
3. Limit yourself to three meals and one PCE a day.
4. Use inhibitors to prevent uncontrolled eating.
5. Use positive thoughts to combat self-defeating negative thinking.
6. Maintain good stimulus control, by keeping all foods and eating in the food area, making eating a pure experience, and eating in your eating area.
7. Chain and take a time-out at each meal.
8. Preplan at least one meal each day.
9. Monitor for your daily and weekly rewards.
10. Limit yourself to one serving of food at each meal.

∈∈∈∈∈Lesson 20∋∋∋∋∋∋

∈∈∈∈∈∈Autobiographical Statement∋∋∋∋∋∋

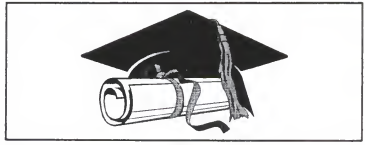
Reflecting on Progress

∈Now that we are almost at the end of the program, it is a good time to take a few minutes to reflect upon your progress. In particular, this is a good opportunity to recognize your accomplishments. In the past ten weeks you have implemented many changes in your eating habits. Your feelings about yourself and your body have probably changed also. Thinking about these changes and about your short- and long-term goals for the future can help you to renew your commitment to succeed. In addition, during times when your progress is slower than you would like, looking back upon what you accomplished during the first nine weeks can help you re-motivate yourself.

∈Therefore, we would like you to write an autobiographical statement. In your statement, you should write about (1) your progress in the past months, (2) your feelings about yourself and your weight, and (3) your short- and long-term goals for your weight loss. Write as though you are writing in a diary or to a good friend. And remember: You will benefit the most from doing this exercise if you are honest and open in your writing.

♣Summary of New Things to be Done This Week:

1. Write an autobiographical statement describing your feelings about yourself and your progress.



Congratulations!!

♣Continue to:

1. Record food intake, calories, and fat grams in your notebook.
2. Limit yourself to three meals.
3. Use inhibitors.
4. Use positive thoughts to combat self-defeating negative thinking.
5. Maintain good stimulus control -- keep all foods and eating in the food area, make eating a pure experience, and make your eating area distinctive.
6. Chain and take a time-out.
7. Preplan at least one meal today.

APPENDIX B
FOOD DIARY MATERIALS

3-Day Food Diary

Please use the Food Record Instructions - Specific Guidelines (pages 2 - 4) in your weight loss manual) when completing this detailed 3-day food diary. Try to be as accurate as possible. Please return by mail to the Psychology Clinic after you have recorded your third day. Thank You.

MONDAY

Breakfast

Amount	Food (Include brand name)

Lunch

Amount	Food (Include brand name)

Dinner

Amount	Food (Include brand name)

Snacks

Amount	Food (Include brand name)

Comments/Problems

_____

_____

_____

Wednesday

Breakfast

Amount	Food (Include brand name)

Lunch

Amount	Food (Include brand name)

Dinner

Amount	Food (Include brand name)

Snacks

Amount	Food (Include brand name)

Comments/Problems

_____

_____

_____

Saturday

Breakfast

Amount	Food (Include brand name)

Lunch

Amount	Food (Include brand name)

Dinner

Amount	Food (Include brand name)

Snacks

Amount	Food (Include brand name)

Comments/Problems

_____

_____

_____

3-Day Food Diary

Please use the Food Record Instructions - Specific Guidelines (pages 2 - 4) in your weight loss manual) when completing this detailed 3-day food diary. Try to be as accurate as possible. Please return by mail to the Psychology Clinic after you have recorded your third day. Thank You.

MONDAY

Breakfast

Amount	Food (Include brand name)
1 cup	Coffee - decaf, Maxwell House
2 Tbsp	Sugar - regular, granular, Publix
1 Tbsp	Cream, powdered, Daisy Brand
1	Sara Lee Cinnamon raisin bagel, toasted
2 Tbsp	Cream Cheese, Philadelphia Brand, regular
2 cups	Orange juice, Dole, from concentrate
1	Powdered donut, Publix brand

Lunch

Amount	Food (Include brand name)
2 slices	Wheat bread, Brannola brand
2 Tbsp	Mayonnaise, Helmanns, regular
1 Tbsp	Mustard, French's, Dijon
2 pieces	Iceberg lettuce, 4 inches long, 4 inches wide
2 slices	Tomato
1/4 cup	Onion, diced, white
4 slices	Ham, regular, from Deli at Winn Dixie
1 can	Diet cola, Coke, 12 oz.
5	Snackwell's vanilla creme cookies

Food Diary Accuracy Rating Form

On a scale from 0 to 4, please rate the accuracy of the enclosed food diary.

0 = not at all accurate
1 = slightly accurate
2 = moderately accurate
3 = very accurate
4 = extremely accurate

My rating (a number 0 to 4): _____ Thank you.

APPENDIX C
QUESTIONNAIRE

What Weight Loss Techniques Did You Try?

Please place a checkmark next to the weight loss methods you tried during this program.

___ 1. I wrote down what I ate.
___ 2. I wrote down how many calories I ate per day.
___ 3. I wrote down how many fat grams I ate per day.
___ 4. I followed my calorie goal.
___ 5. I restricted the number of times I ate outside of my eating schedule.
___ 6. I scheduled my meals and ate at specific times each day.
___ 7. I limited uncontrolled eating.
___ 8. I developed inhibitors (e.g., reading, taking a shower).
___ 9. I placed all food in the food area.
___ 10. I stopped eating outside of the food area.
___ 11. I cut out all activities during eating and made eating a pure experience
___ 12. I ate slower.
___ 13. I would take a time-out during eating to help decrease how much I ate.
___ 14. I made food less visible.
___ 15. I wrapped goodies in aluminum foil so that I wouldn't see them.
___ 16. I put food in inaccessible places.
___ 17. I bought foods that required preparation.
___ 18. I would go grocery shopping on a full stomach.
___ 19. I bought less snack foods.
___ 20. I set up daily rewards when I met personal goals.
___ 21. I set up weekly rewards when I met personal goals.
___ 22. I preplanned on hectic days.
___ 23. I read food labels before I bought food.
___ 24. I preplanned on holidays/specials occasions.
___ 25. I became more assertive in social situations and I said 'no' more often to food.
___ 26. I used problem solving to help change my eating patterns.
___ 27. I replaced negative thoughts with positive thoughts and this helped me in my weight loss efforts.
___ 28. I used positive imagery to help me reach my goals.
___ 29. I walked or exercised more.
___ 30. Other_____

THANK YOU!

APPENDIX D
SELF-MONITORING FORMS

Food Log Day: M T W Th F Sa Su (circle one) Date:

Time	Amount	Food	Calories/Fat grams
Breakfast			
___	_____	_____	_____
___	_____	_____	_____
___	_____	_____	_____
___	_____	_____	_____
___	_____	_____	_____
___	_____	_____	_____
Lunch		Total:	_____/___
___	_____	_____	_____
___	_____	_____	_____
___	_____	_____	_____
___	_____	_____	_____
___	_____	_____	_____
___	_____	_____	_____
___	_____	_____	_____
Dinner		Total:	_____/___
___	_____	_____	_____
___	_____	_____	_____
___	_____	_____	_____
___	_____	_____	_____
___	_____	_____	_____
___	_____	_____	_____
___	_____	_____	_____
___	_____	_____	_____
___	_____	_____	_____
___	_____	_____	_____
Snacks		Total:	_____/___
___	_____	_____	_____
___	_____	_____	_____
___	_____	_____	_____
		Total:	_____/___

Calorie Totals:		Fat Gram Totals:	
Breakfast:	_____	Breakfast:	_____
Lunch:	_____	Lunch:	_____
Dinner:	_____	Dinner:	_____
Snack:	_____	Snack:	_____
Daily Total:	_____	**Daily Total**:	_____

M T W Th F Sa Su

Food Guide Pyramid Serving Suggestions for a 1,200 Calorie Diet

Breads 4	Vegetables 3	Fruit 3	Milk 2	Meat 5 ounces	Fat gram goal = 15g

Breakfast **Food and Amount** **Calories/Fat Grams**

Lunch **Food and Amount** **Calories/Fat Grams**

Dinner **Food and Amount** **Calories/Fat Grams**

Monitor the total number of servings you consume daily from each of the 5 food groups in the following table. Simply use a slash (/) to indicate one serving consumed. Try to limit your daily fat intake to 15 grams per day.

Breads	Vegetables	Fruit	Milk	Meat	Total Fat grams

M T W Th F Sa Su

Food Guide Pyramid Serving Suggestions for a 1,500 Calorie Diet

Breads 6	Vegetables 3	Fruit 2	Milk 2-3	Meat 5 ounces	Fat gram goal = 15g

Breakfast **Food and Amount** **Calories/Fat Grams**

_____

_____

_____

_____

_____

Lunch **Food and Amount** **Calories/Fat Grams**

_____

_____

_____

_____

_____

Dinner **Food and Amount** **Calories/Fat Grams**

_____

_____

_____

_____

_____

Monitor the total number of servings you consume daily from each of the 5 food groups in the following table. Simply use a slash (/) to indicate one serving consumed. Try to limit your daily fat intake to 15 grams per day.

Breads	Vegetables	Fruit	Milk	Meat	Total Fat grams

APPENDIX E
INVESTIGATOR'S MANUALS

Subject Number_____

Investigator's Manual/Subject Data

Pretreatment Assessment

Therapist Guidelines (check off each task when completed, ✓)

_____1. Welcome patient. Let the patient read the consent, review it briefly with them, and then have him/her sign the consent form (Is the patient having a hard time reading? While this should not be a problem because we screen patients on the phone regarding their reading ability, if the patient seems like he/she can't read or he/she is having significant difficulty reading, tell him/her that because our study involves a good deal of reading that enrollment in the study probably wouldn't be helpful. (You can give them the materials to take home, but tell them that we can't recruit them for the study because of the reading level screening criteria).

_____2. Obtain the following demographic information:

Phone number (in case patient is in the Therapist Contact Group)_____

Gender: M[1] or F[2]

Marital Status: Single[1] Married[2] Separated[3] Divorced[4]

How many people are living in your home? 1[1] 2[2] 3[3] 4[4] 5[5] 6[6] other: _____

Age of patient: _____

Race:

White[1]	American Indian[5]
African American[2]	Pacific Islander[6]
Asian[3]	Other[7]
Hispanic[4]	

Religion:

Baptist[1]	Protestant[4]
Catholic[2]	Lutheran[5]
Jewish[3]	Other[6]

Education:

Less than 7th[1]	partial college[5]
9th grade[2]	College[6]
10th or 11th[3]	Graduate/professional training[7]
high school or graduate[4]	

Do you work? Yes[1] No[2], if so, Occupation: _____

Does your spouse work? Yes[1] No[2]

Estimated Gross Annual Family Income: _____(in thousands of dollars)

3-Day Food Diary

_____3. Review the guidelines on page 1 and 2 of the bibliotherapy manual for completing the 3-day food diaries.

_____4. Emphasize accuracy and detail in recording food consumed for the 3-day food diary.

_____5. Review the Sample 3-day food diary to give patients an idea of what they will be doing.

_____6. Refer to the guidelines presented in the first few pages of the bibliotherapy manual while reviewing the sample 3-day food diary.

_____7. Answer any questions. Be aware that some patients may react negatively to the extreme detail we are requiring for these food records. Acknowledge that this can be challenging task, but that it will help them to better understand their eating habits.

_____8. Tell the patient that he/she will need to code Monday and Wednesday, and Saturday. **Tell the patient that he/she must not change their eating habits this week**. Tell them to return the food diary in the self addressed and stamped envelope after they finish writing down the last day. Point out that they will be asked to rate the accuracy of the 3-day diary on a short form stapled to the 3-day food diary sheets.

_____9. Get height, weight, and waist measures of the patient.

____ Height in inches
____ Weight in pounds
____ Waist measures in inches

_____10. Randomly assign patient to a treatment group by selecting one piece of paper out of a cup containing two pieces of paper with the following numbers (1=Bibliotherapy Only group, 2=Bibliotherapy plus Telephone Contact group). Tell patient what group they have been assigned to.

_____11. Put patient's name on the main study roster. Get subject number.

_____12. Have subjects complete the Food Frequency Questionnaire.

_____13. **For patients in the Bibliotherapy plus Telephone Contact group**:

1. Give patient the treatment manual, self-monitoring forms (2 types - 21 Food Guide Pyramid self monitoring forms and 56 fat/calorie self monitoring forms), and 12 postcards with their subject number.

2. Briefly review the components of this treatment that will assist weight loss:

* You will be asked to self monitor (food intake, calories and fat)
* You will asked to follow a daily calorie goal (don't mention goal level yet)
* You will be asked to follow a daily fat gram (don't mention goal level yet)
* You will be provided with a bibliotherapy manual.

3. Review the self monitoring forms (both forms).
4. Give patients the reference for the Fat book - Fat Book, Karen Bellerson.
5. Schedule the date and time of the first phone therapy session. (This should occur within 7-10 days).

Date:_____ Time:_____

For patients in the Bibliotherapy-Only group (This is our only contact with these patients until the followup assessment so be thorough):

1. Give patient the treatment manual, self-monitoring forms (2 types - 21 Food Guide Pyramid self monitoring forms and 56 fat/calorie self monitoring forms), and 12 postcards with their subject number written on each postcard.
2. Discuss the components of this treatment that will assist weight loss:

* You will be asked to self monitor (food intake, calories and fat)
* You will asked to follow a daily calorie goal of 1,500 calories per day.
* You will be asked to follow a daily fat gram goal of 15 grams per day.
* You will be provided with a variety of cognitive and behavioral techniques for weight loss in this manual.

3. Review IN DEPTH the self-monitoring forms. Tell patients that self monitoring is crucial for weight loss. Instruct patients to write down what they eat every day on the self monitoring forms so that they can limit their calorie and fat intake to facilitate weight loss.
4. Instruct patients to limit their caloric intake to 1500 calories per day.
5. Tell patients that they should cut their fat intake to 15 grams per day.
6. Give patients the reference for the Fat book - Fat Book, Karen Bellerson.
7. Wish them luck and tell them that we will contact them in approximately 10 weeks for another assessment.

_____17. Thank all patients for coming and wish them luck in completing the 3-day food diary. Be supportive and try to convey to him/her that you know he/she will do a great job.

_____18. After the session, be sure to write the patient's subject number on the front of this manual.

Posttreatment Assessment

Therapist Guidelines:

_____1. Review the guidelines on page 1 and 2 for completing the 3-day food diary.

_____2. Emphasize accuracy and detail in recording food consumed for the 3-day food diary.

_____3. Review the sample 3-day food diary entry.

_____4. Use the guidelines presented on page 3-6 of the manual while reviewing the sample 3-day food diary.

_____5. Answer any questions.

_____6. Tell the patient that he/she will need to code Monday and Wednesday in detail during the week and Saturday on the weekend. Also tell the patient that he/she must not change their eating habits this week.

_____7. Get weight and waist measures.

_____ Weight in pounds

_____ Waist measures in inches

_____8. Administer the Food Frequency Questionnaire.

_____9. Before the patient leaves, make sure you gave him/her the addressed and stamped envelope so he/she can return the 3-day food diaries in one week.

_____10. Give the patient more Food Guide self-monitoring forms (84 pages) and 12 more postcards with their subject number written on them. Have them complete the 'What Techniques did you try?' questionnaire.

_____11. Schedule the follow-up appointment in the study calendar to occur 12 weeks following today's appointment. Call patient the week of the appointment to remind them about the follow-up assessment.

Follow-up Assessment

Therapist Guidelines:

_____1. Review the guidelines on page 1 and 2 for completing the 3-day food diary.

_____2. Emphasize accuracy and detail in recording food consumed for the 3-day food diary.

_____3. Review the sample 3-day food diary entry.

_____4. Use the guidelines presented on page 3-6 of the manual while reviewing the sample 3-day food diary.

_____5. Answer any questions.

_____6. Tell the patient that he/she will need to code Monday and Wednesday in detail during the week and Saturday on the weekend. Also tell the patient that he/she must not change their eating habits this week.

_____7. Get weight and waist measures.

____ Weight in pounds

____ Waist measures in inches

_____8. Administer the Food Frequency Questionnaire.

_____9. Before the patient leaves, make sure you gave him/her the addressed and stamped envelope so he/she can return the 3-day food diaries in one week.

_____10. Give the patient more Food Guide self-monitoring forms if desired. Have patient complete the 'What Techniques did you try?' questionnaire.

_____11. Thank the patient for his/her participation in the study and wish him/her luck.

Subject Number_____

Investigator's Manual/Subject Data
Bibliotherapy plus Therapist Contact Group

Session 1 - Lesson 1

Therapists: Always read the lesson before you call the patient. During the phone call, always review the lesson first. Try not to be side tracked too long by patient questions because they may interfere with your ability to finish the session in 20 minutes.

If a patient goes on a tangent or wants you to discuss something that is several lessons ahead in the manual, tell the patient that you are following a standard research protocol and that you must review the material in the same manner with all patients.

Be directive and prescriptive. Be positive about the benefits of trying the various weight loss techniques presented.

When you are reviewing lessons, do it directly from the bibliotherapy manual, I did not write out each lesson in detail in the investigator's manual and you may miss important material.

Don't remind the patient to send in their self monitoring postcards because we won't be reminding subjects in the bibliotherapy-only group.

Some Sessions span several pages. Be careful to follow the outline closely so that you won't miss any components by forgetting to go the next page.

_____1. **IMPORTANT. Did you send us your 3-day Food Diary** (Tell them "great" if they did or "please send it as soon as possible in the stamped envelope" if they didn't).
_____2. Give a brief overview of what you will be doing during each phone session.

"Before I begin reviewing today's lesson, I would like to tell you the general format that I will follow for the phone therapy sessions. During each 20 minute session I will always review the lessons for that week first. You will always be encouraged to ask questions if something is not clear. After I have reviewed the lessons, then I will review the new techniques that I would like you to start using. At the end of the session I will ask you about the weight loss techniques you are presently using. Finally, I will confirm the next appointment time with you. Any questions?"

I would like to begin this session by discussing the focus of lesson 1 which is self-monitoring, (a very powerful behavioral technique for weight loss).

_____3. The central benefits of monitoring what you eat is that it can help identify problematic eating behaviors that we can target for change. For example, by self monitoring you can learn how many calories and fat grams you consume each day and you can make appropriate changes in the foods that you eat to help you lose weight. By self monitoring, you will also find out when, where, and with whom you have difficulties limiting your food intake.

Self monitoring is very powerful weight loss technique and I am confidant that if you self monitor daily that it will help you to lose weight.

QUESTIONS?

_____4. Tell patients to record their food intake as well as their calorie and fat intake in the **"calorie/fat gram" food logs** distributed at the time of the pretreatment assessment. Let them know that they need not be as detailed as in the 3-day food diaries, but that accuracy is important. **Patients are instructed not to change their eating habits this week so that they can identify problem areas to be changed in the near future (e.g., eating too much fat, snacking across the day, eating more in social situations etc...).**

_____5. **Important**. Tell patients that you will be reviewing their food logs with them on the phone next week so that it will be important to have those completed for next week.

_____6. Review the 'Summary of New Steps to Do' and 'Continue to Do' lists in the manual. Tell participant that you will review Lesson 2 and 3 next week.

_____7. Confirm the date and time of the next phone session. This session is over.

NOTES from Session 1:

Session 2 - Lesson 2 and Lesson 3 - This week patients start regulating their caloric and fat intake for weight loss!!!

Note: Remember, WE WILL NEVER PRESCRIBE EXERCISE FOR WEIGHT LOSS IN THIS STUDY!!! (We will never recommend that patients walk, run, jog, cycle or engage in any other physical activity for weight loss). If a patient wishes to exercise, tell him/her to have it cleared by his/her physician.

Lesson 2

_____1. In this lesson, patients will analyze their eating patterns with you.

_____2. Ask patient to take out their eating logs and then ask the following questions? (assess for problem areas)

What were your daily calorie and fat intakes: note:_____
When do you eat?
Are you eating more than 3 meals per day?
How often did you eat with others? do you overeat or undereat with others?
Where did you typically eat? (e.g., the living room, at restaurants...).
Do you eat in front of the TV?
Are their foods that you can't resist that may make it difficult to lose weight? Let's think of some alternatives.....
Do you crave foods high in fat? If so, let's think of some low fat alternatives.

_____3. Be attentive to patient's problem areas and point out potential areas for intervention (e.g., well, from what you have described, it seems that you eat about 4 meals as well as several snacks during the day which may make it hard to lose weight. However, this week and in the coming weeks we will be reviewing several powerful techniques to help you to eat in ways that may better help you lose weight. By analyzing your eating patterns you have learned some very useful information that will help you to lose weight. That's great, you are off to a super start!)

Note the patient's problem areas that may need to be addressed more in the future:
_____
_____
_____

_____4. Answer any questions? NICE JOB with the self monitoring, now we will move on to Lesson 3.

Lesson 3

_____1. This lesson reviews factors that can influence eating. The lesson is great because it emphasizes techniques that can help limit eating.
_____2. Review the weight loss techniques presented in this lesson. Therapists be directive and prescriptive. Tell patients that you want them to try these techniques (i.e., you are doing more than just describing these techniques).

-First, **I want you to decrease the number of meals** you eat per day. This can help you to control your calorie and fat intake and help you to lose weight. Limit the number of meals to three per day and one planned and controlled eating (PCE). This means patients can plan to have one snack per day).

-Second, **I want you to schedule meals. Meal scheduling** will help to decrease the number of times you eat per day, and thus help you to limit your caloric and fat intake. Also, with meal scheduling, you are less likely to miss a meal and then overeat later.

-Third, I want you to **limit the number of uncontrolled (unplanned) eatings** (i.e., snacking) to 4 this week.

-Fourth, make a list of **inhibitors** to help prevent uncontrolled eating. Point out the FREE FOODS chart to help control urges to eat high fat/high calorie foods.

_____3. Answer any questions.

Most IMPORTANTLY for weight loss:

4.To facilitate weight loss, I would like you to begin limiting your calorie intake to **1,500 calories per day**, and regulate your fat intake to **15 grams per day**. Limiting your caloric and fat intake will really help you to lose weight. Tell patients to carefully read food labels to help keep track of calorie and fat intake. Remind patients that they can buy calorie and fat gram counting books to assist in keeping track of calories and fat grams (such as the Fat Book).

Note to therapists: In the future, we can be flexible with the calorie and fat gram goals (altering them if patients aren't losing weight). You will likely just lower the calorie goal by 100 or 200 calories. We will never ask patients to eat fewer than 1200 calories or 15 grams of fat per day.

_____5. Review the 'Summary of New Steps to Do' and 'Continue to Do' lists for both lessons in the manual. Tell participant that you will review Lesson 4 and 5 next week.
_____6. Confirm the date and time of the next phone session.

■■IMPORTANT

Tell patients: "We are interested in tracking the weight loss techniques that you use during the program, so each week I will ask you about which techniques that you are currently using": (Use the following list to identify what techniques the patient is presently using to lose weight. Review this list in a check list-fashion, asking about each technique and checking the appropriate column.)

	Daily 7/week	**Freq. Often 4-6/week**	**1-3/week**	**Never 0/week**
Recording food intake	____	____	____	____
Calculating calorie intake	____	____	____	____
Monitoring fat intake	____	____	____	____
Following the calorie goal	____	____	____	____

Are you using any other strategies for weight loss? (if patients say they are exercising, ask if it was approved by their cardiologist. What Technique do you think is working best for you?_____

Session 2 Notes:

Session 3 - Lesson 4 and Lesson 5 (remember to use the manual when presenting this information)

_____1. This session reviews stimulus control techniques and ways to make eating a pure experience.
_____2. Review the following guidelines:

- Create a Food Area where you will prepare and eat foods.
- Discontinue noneating in the food area.
- Make eating a pure experience.

_____3. Answer any questions and go on to Lesson 5.

Lesson 5

_____1. This lesson reviews a behavioral technique to help control amount of food eaten at mealtime. The technique is called **chaining.**
_____2. Describe what chaining means (slowing down eating by concentrating on the process of eating) and ascertain if patient understands this technique.
_____3. Answer any questions.

Ask patients how they are doing following the calorie goal of **1,500 calories per day** and the fat gram goal of **15 grams per day**. Problem solve with patient to solve difficulties. Don't alter these goals yet if patients ask if they can lower or increase these goals. Remember, never ask patients to eat fewer than 1200 calories or 15 fat grams.
_____4. Review the 'Summary of New Steps to Do' and 'Continue to Do' lists in the manual. Tell the participant that you will review Lesson 6 and 7 next week.
_____5. Confirm the date and time of the next phone session.

■■IMPORTANT: Use the following list to identify what techniques the patient is presently using to lose weight. Review this list in a check list-fashion, asking about each technique and checking the appropriate column.

	Daily 7/week	Freq. 4-6/week	Often 1-3/week	Never 0/week
Recording food intake	____	____	____	____
Calculating calorie intake	____	____	____	____
Monitoring fat intake	____	____	____	____
Following the calorie goal	____	____	____	____
Limiting number of meals	____	____	____	____
Scheduling meals	____	____	____	____
Limiting uncontrolled eating	____	____	____	____

Using inhibitors ____ ____ ____ ____
Other Strategies_____
What technique(s) do you think are working best for you?_____
_____

NOTES from Session 3:

Session 4 - Lesson 6 and Lesson 7

Lesson 6

_____1. This lesson reviews another behavioral technique to help control amount of food eaten at meals. The technique is called **time-out**.
_____2. Describe what a time-out is (a break during a meal to assess how full the stomach is) and ascertain if the patient understands this technique.
_____3. Answer any questions and go on to Lesson 7.

Lesson 7

_____1. This lesson discusses the value of rewards to help meet goals.
_____2. Briefly review 3 points about rewards (Daily reward, weekly reward, and making a list of reinforcers.
_____3. Ask the subject what would be good reinforcers for them.
_____4. Answer any questions. Tell patient to continue following the calorie and fat gram goals.
_____5. Encourage patients to complete the reward sheet daily to evaluate their progress. Remind them to reward themselves for meeting personal goals (an example of a personal goal may be to get at least 8 points on this worksheet).
_____6. Review the 'Summary of New Steps to Do' and 'Continue to Do' lists in the manual. Tell participants that they are doing a great job and that you will review Lesson 8 next week.
_____7. Confirm the date and time of the next phone session.

■■IMPORTANT: Use the following list to identify what techniques the patient is presently using to lose weight. Review this list in a check list-fashion, asking about each technique and checking the appropriate column.

	Daily 7/week	Freq. 4-6/week	Often 1-3/week	Never 0/week
Recording food intake	____	____	____	____
Calculating calorie intake	____	____	____	____

Monitoring fat intake	____	____	____	____
Following the calorie goal	____	____	____	____
Limiting number of meals	____	____	____	____
Scheduling meals	____	____	____	____
Limiting uncontrolled eating	____	____	____	____
Using inhibitors	____	____	____	____
Made a Food Area	____	____	____	____
Stopped Noneating in Food Area	____	____	____	____
Pure Experience	____	____	____	____
Chaining	____	____	____	____

Other Strategies_____

What Technique(s) do you think are working best for you?_____

_____

NOTES from Session 4:

Session 5 - Lesson 8

_____1. This lesson discusses how changes in daily activities can make it difficult to maintain good eating habits.

_____2. Talk about the importance of preplanning on hectic days. Encourage patients not to let the program take a back seat when their lives get busy.

_____3. Answer any questions. Tell patient to continue following the 1500 calorie and 15 gram fat gram goal.

_____4. Review the 'Summary of New Steps to Do' and 'Continue to Do' lists in the manual. Tell participant that you will review Lessons 9 and 10 next week.

_____5. Confirm the date and time of the next phone session.

■■IMPORTANT: Use the following list to identify what techniques the patient is presently using to lose weight. Review this list in a check list-fashion, asking about each technique and checking the appropriate column.

	Daily 7/week	Freq. 4-6/week	Often 1-3/week	Never 0/week
Recording food intake	____	____	____	____
Calculating calorie intake	____	____	____	____
Monitoring fat intake	____	____	____	____
Following the calorie goal	____	____	____	____
Limiting number of meals	____	____	____	____
Scheduling meals	____	____	____	____
Limiting uncontrolled eating	____	____	____	____
Using inhibitors	____	____	____	____

Made a Food Area	____	____	____	____
Stopped Noneating in Food Area	____	____	____	____
Pure Experience	____	____	____	____
Chaining	____	____	____	____
Time-out	____	____	____	____
Daily rewards	____	____	____	____
Weekly Rewards	____	____	____	____

Other Strategies_____

_____

What Technique(s) do you think are working best for you?_____

NOTES from Session 5:

Session 6 - Lesson 9

Lesson 9

_____1. This lesson is great because it presents a variety of techniques to control impulse eating.
_____2. Briefly review the 8 techniques presented in the lesson (use the manual).
_____3. Answer any questions about the techniques.
_____4. This lesson also presents nutrition information. Instruct the patient to read it this coming week and to write down any questions that they have to discuss next week.
_____5. Answer any questions. Tell patient to continue following the 1500 calorie and 15 gram-fat gram goal.
_____6. Encourage patients to complete the worksheet at the end of this week to evaluate how many of the impulse control techniques (Lesson 9) that they successfully apply during the week. You can tell patients that some of the techniques that we are going to present may not work for them and that they are free to choose the techniques that work best for them.
_____7. Review the 'Summary of New Steps to Do' and 'Continue to Do' lists in the manual. Tell participants that you will review Lessons 11 and 12 next week.
_____8. Confirm the date and time of the next phone session.

■■IMPORTANT: Use the following list to identify what techniques the patient is presently using to lose weight. Review this list in a check list-fashion, asking about each technique and checking the appropriate column.

	Daily 7/week	**Freq. 4-6/week**	**Often 1-3/week**	**Never 0/week**

Recording food intake	____	____	____	____
Calculating calorie intake	____	____	____	____
Monitoring fat intake	____	____	____	____
Following the calorie goal	____	____	____	____
Limiting number of meals	____	____	____	____
Scheduling meals	____	____	____	____
Limiting uncontrolled eating	____	____	____	____
Using inhibitors	____	____	____	____
Made a Food Area	____	____	____	____
Stopped Noneating in Food Area	____	____	____	____
Pure Experience	____	____	____	____
Chaining	____	____	____	____
Time-out	____	____	____	____
Daily rewards	____	____	____	____
Weekly Rewards	____	____	____	____
Preplanning on hectic days	____	____	____	____

Other Strategies_____

What Technique(s) do you think are working best for you?_____

_____

Notes from Session 6:

Session 7 - Lesson 10 and Lesson 11

Lesson 10

_____1. This lesson discusses the importance of reading what **ingredients** are in the foods that are purchased. Some foods that may seem like they are "good" food choices, may actually have more fat or salt or sugar than the patient's realized. Therefore, stress the importance of reading food labels.

_____2. Review what is typically reported on a food label and how knowing this information can help decrease caloric and fat content in the diet and thus aid weight loss.

- Standardized serving sizes
- Information on fat including how many saturated fat grams
- Information on fiber and sugar, which will be listed under carbohydrate

Tell the patient that reviewing fat gram and calorie information will help them keep losing weight.

_____3. Answer any questions and move on to Lesson 11.

Lesson 11

_____1. This lesson discusses the importance of preplanning for holidays or special

occasions. Talk about how there are usually special foods at holidays and that depriving oneself may lead to a binge or overeating. Therefore encourage **moderation and planning**.

_____2. Review some benefits of Preplanning:
-it can help patients maintain calorie and fat intake goals
-it can decrease stress

_____3. Answer any questions. Tell patient to continue following the 1500 calorie and 15 gram-fat gram goal.

_____4. Encourage patient to analyze the labels for foods bought. In particular, have patients observe the information about the fat content and caloric value associated with one serving size.

_____5. Review the 'Summary of New Steps to Do' and 'Continue to Do' lists in the manual. Tell participants that you will review Lessons 12 and 13 next week.

_____6. Confirm the date and time of the next phone session.

■■IMPORTANT: Use the following list to identify what techniques the patient is presently using to lose weight. Review this list in a check list-fashion, asking about each technique and checking the appropriate column.

	Daily 7/week	Freq. 4-6/week	Often 1-3/week	Never 0/week
Recording food intake	____	____	____	____
Calculating calorie intake	____	____	____	____
Monitoring fat intake	____	____	____	____
Following the calorie goal	____	____	____	____
Limiting number of meals	____	____	____	____
Scheduling meals	____	____	____	____
Limiting uncontrolled eating	____	____	____	____
Using inhibitors	____	____	____	____
Made a Food Area	____	____	____	____
Stopped Noneating in Food Area	____	____	____	____
Pure Experience	____	____	____	____
Chaining	____	____	____	____
Time-out	____	____	____	____
Daily rewards	____	____	____	____
Weekly Rewards	____	____	____	____
Preplanning on hectic days	____	____	____	____
Making food less visible	____	____	____	____
Wrap food in aluminum foil	____	____	____	____
Put food in inaccessible places	____	____	____	____
Bought foods that required preparation	____	____	____	____
Grocery shop on a full stomach	____	____	____	____

Buy less junk food _____ _____ _____ _____
Pause briefly after eat bite _____ _____ _____ _____
Other Strategies_____
What Technique(s) do you think are working best for you?_____

NOTES from Session 7:

Session 8 - Lesson 12 and Lesson 13

Lesson 12

_____1. This lesson discusses the benefits of being assertive in food-related situations.
_____2. Review the components of an assertive response:
-Tone of voice -Eye contact
-Expressing your desires clearly
-Compliment the host -Suggest an alternative
_____3. NEW TECHNIQUE: SERVING LIMITING. Tell patients that you would like them to limit their servings at meals to only one serving of each food.
_____4. Answer any questions and go on to Lesson 13.

Lesson 13

_____1. This lesson reviews the process of problem solving. Ask patient if there are any problems related to eating that are making it hard to lose weight. Use the following problem solving procedure to help them get started on solving the problem. REVIEW the example with Brian (he had difficulty controlling his eating after dinner) in the manual if they can't think of any problems.
_____2. Review the problem solving steps:
-Identify the problem
-List alternatives (brainstorm)
-Evaluate the alternatives listed
-Choose one or more of the alternatives to try
-Put a plan into action
-Evaluate progress
-Begin again, if necessary
_____3. Answer any questions. Tell patient to continue following the 1500 calorie and 15 gram-fat gram goal.
_____4. Review the Summary to things to do and Continue to do lists. Tell participants that you will review Lessons 14 and 15 next week.
_____5. Confirm the date and time of the next phone session.

■■IMPORTANT: Use the following list to identify what techniques the patient is

presently using to lose weight. Review this list in a check list-fashion, asking about each technique and checking the appropriate column.

	Daily 7/week	Freq. 4-6/week	Often 1-3/week	Never 0/week
Recording food intake	____	____	____	____
Calculating calorie intake	____	____	____	____
Monitoring fat intake	____	____	____	____
Following the calorie goal	____	____	____	____
Limiting number of meals	____	____	____	____
Scheduling meals	____	____	____	____
Limiting uncontrolled eating	____	____	____	____
Using inhibitors	____	____	____	____
Made a Food Area	____	____	____	____
Stopped Noneating in Food Area	____	____	____	____
Pure Experience	____	____	____	____
Chaining	____	____	____	____
Time-out	____	____	____	____
Daily rewards	____	____	____	____
Weekly Rewards	____	____	____	____
Preplanning on hectic days	____	____	____	____
Making food less visible	____	____	____	____
Wrap food in aluminum foil	____	____	____	____
Put food in inaccessible places	____	____	____	____
Bought foods that required preparation	____	____	____	____
Grocery shop on a full stomach	____	____	____	____
Buy less junk food	____	____	____	____
Pause briefly after eat bite	____	____	____	____
I read food labels	____	____	____	____
I preplan on holidays	____	____	____	____

Other Strategies_____

What technique(s) do you think are working best for you? _____

NOTES from Session 8:

Session 9 - Lesson 14 and 15

Lesson 14

_____1. This lesson reviews the power of positive and negative thinking on progress.

_____2. Review the following principle:

-How one thinks can affect behavior (e.g., Thinking "I am a failure" can lead to slips in following the program; Thinking "I did a good job self monitoring today"

can increase the likelihood that the participants will do well again).

_____3. Review the steps to changing thought patterns

-Observe your thoughts -Write them down for further study

-Change your ideas

Lesson 15

This lesson reviews how to use the food guide for making food choices and limiting fat and calorie intake. Follow the lesson in the manual carefully.

_____1. Review what the Food Guide Pyramid is and tell patients that the guide will help them make good food choices from the 5 food groups.

_____2. Review what a serving size is for each of the food groups.

_____3. Discuss the difficulty of using the food guide for foods with more than one ingredient from different food groups (e.g., a casserole may have servings from the grains, meats, and vegetable groups). Tell patients that they will need to be careful recording servings for foods with several ingredients.

_____4. Ask patients if they have any questions.

_____5. Tell patients to begin using the **"Food Guide Pyramid" self monitoring forms** so that they can begin keeping track of the number of servings they are getting from each of the 5 food groups. Tells patients to continue self monitoring and keeping track of calorie and fat gram intake. Tell patient to continue following the 1500 calorie and 15 gram-fat gram goal.

_____6. Review the Summary to things to do and Continue to do lists. Tell participants that you will review Lessons 16 and 17 next week.

_____7. Confirm the date and time of the next phone session.

■■IMPORTANT: Use the following list to identify what techniques the patient is presently using to lose weight. Review this list in a check list-fashion, asking about each technique and checking the appropriate column.

	Daily 7/week	Freq. 4-6/week	Often 1-3/week	Never 0/week
Recording food intake	____	____	____	____
Calculating calorie intake	____	____	____	____
Monitoring fat intake	____	____	____	____
Following the calorie goal	____	____	____	____
Limiting number of meals	____	____	____	____
Scheduling meals	____	____	____	____
Limiting uncontrolled eating	____	____	____	____
Using inhibitors	____	____	____	____
Made a Food Area	____	____	____	____
Stopped Noneating in Food Area	____	____	____	____
Pure Experience	____	____	____	____
Chaining	____	____	____	____
Time-out	____	____	____	____

Daily rewards	____	____	____	____
Weekly Rewards	____	____	____	____
Preplanning on hectic days	____	____	____	____
Making food less visible	____	____	____	____
Wrap food in aluminum foil	____	____	____	____
Put food in inaccessible places	____	____	____	____
Bought foods that required preparation	____	____	____	____
Grocery shop on a full stomach	____	____	____	____
Buy less junk food	____	____	____	____
Pause briefly after eat bite	____	____	____	____
I read food labels	____	____	____	____
I preplan on holidays	____	____	____	____
I am more assertive in food-related situations	____	____	____	____
I eat only 1 serving per meal	____	____	____	____
I use problem solving	____	____	____	____

Other Strategies_____

What Technique(s) do you think are working best for you? _____

Session 10 - Lesson 16 and Lesson 17

Lesson 16

_____1. This lesson is brief worksheet for patients to review. Review the first and third inappropriate and appropriate thoughts about eating and snacking with the patient.

_____2. Ask patient if they have ever had any of the inappropriate thoughts. Talk about the implications for this inappropriate thought on behavior (e.g., overeating).

_____3. Answer any questions, go on to lesson 17.

Lesson 17

_____1. This lesson reviews how underlying assumptions which are related to one's thoughts can affect progress in the program. Talk about the idea of the self fulfilling prophecy discussed in the manual.

_____2. Discuss the idea that unconscious hidden benefits (EMPHASIZE THAT THESE BELIEFS ARE LIKELY UNCONSCIOUS BECAUSE IT IS LESS BLAMING) of not losing weight can affect progress in the program (review worksheet).

_____3. Review the Summary to things to do and Continue to do lists. Tell participants that you will review Lesson 18 and 19 next week.

_____4. Confirm the date and time of the next phone session.

■■IMPORTANT: Use the following list to identify what techniques the patient is

presently using to lose weight. Review this list in a check list-fashion, asking about each technique and checking the appropriate column.

	Daily 7/week	Freq. 4-6/week	Often 1-3/week	Never 0/week
Recording food intake	____	____	____	____
Calculating calorie intake	____	____	____	____
Monitoring fat intake	____	____	____	____
Following the calorie goal	____	____	____	____
Limiting number of meals	____	____	____	____
Scheduling meals	____	____	____	____
Limiting uncontrolled eating	____	____	____	____
Using inhibitors	____	____	____	____
Made a Food Area	____	____	____	____
Stopped Noneating in Food Area	____	____	____	____
Pure Experience	____	____	____	____
Chaining	____	____	____	____
Time-out	____	____	____	____
Daily rewards	____	____	____	____
Weekly Rewards	____	____	____	____
Preplanning on hectic days	____	____	____	____
Making food less visible	____	____	____	____
Wrap food in aluminum foil	____	____	____	____
Put food in inaccessible places	____	____	____	____
Bought foods that required preparation	____	____	____	____
Grocery shop on a full stomach	____	____	____	____
Buy less junk food	____	____	____	____
Pause briefly after eat bite	____	____	____	____
I read food labels	____	____	____	____
I preplan on holidays	____	____	____	____
I am more assertive in food-related situations	____	____	____	____
I eat only 1 serving per meal	____	____	____	____
I use problem solving	____	____	____	____
I am working on changing negative thoughts to positive thoughts	____	____	____	____
I use the Food Guide Pyramid to guide my food choices	____	____	____	____

Other Strategies_____

What Technique(s) do you think are working best for you? _____

Session 11 - Lesson 18 and Lesson 19

Lesson 18

_____1. Imagery can be a very powerful technique to help you reach your goals.
_____2. Talk about how athletes use imagery to help them imagine a great performance. Talk about how imagery can be used in weight loss (e.g., imagining oneself 5 pounds lighter).
_____3. Answer any questions and go on to Lesson 19

Lesson 19

_____1. This lesson discusses the stages of change according to Prochaska and DiClemente.
_____2. Review the stages of change.

-Precontemplation
-Contemplation
-Determination
-Action - (This is where we hope the patients have been)
-Maintenance - (This is where we hope the patients will be going after the next session)
-Relapse

Tell patients that 'slips' are not the same as a relapse. Tell them that slips can help one identify problem areas as well as motivate problem solving.
_____3. Answer any questions. Tell patient to continue following the 1500 calorie and 15 gram-fat gram goal, and to monitor food intake using the Food Guide Pyramid.
_____4. Review the Summary to things to do and Continue to do lists. Tell the participant that you will review the last lesson next week.
_____5. Confirm the date and time of the next phone session.

■■IMPORTANT: Use the following list to identify what techniques the patient is presently using to lose weight. Review this list in a check list-fashion, asking about each technique and checking the appropriate column.

	Daily 7/week	Freq. 4-6/week	Often 1-3/week	Never 0/week
Recording food intake	____	____	____	____
Calculating calorie intake	____	____	____	____
Monitoring fat intake	____	____	____	____
Following the calorie goal	____	____	____	____
Limiting number of meals	____	____	____	____
Scheduling meals	____	____	____	____
Limiting uncontrolled eating	____	____	____	____

Using inhibitors	____	____	____	____
Made a Food Area	____	____	____	____
Stopped Noneating in Food Area	____	____	____	____
Pure Experience	____	____	____	____
Chaining	____	____	____	____
Time-out	____	____	____	____
Daily rewards	____	____	____	____
Weekly Rewards	____	____	____	____
Preplanning on hectic days	____	____	____	____
Making food less visible	____	____	____	____
Wrap food in aluminum foil	____	____	____	____
Put food in inaccessible places	____	____	____	____
Bought foods that required preparation	____	____	____	____
Grocery shop on a full stomach	____	____	____	____
Buy less junk food	____	____	____	____
Pause briefly after eat bite	____	____	____	____
I read food labels	____	____	____	____
I preplan on holidays	____	____	____	____
I am more assertive in food-related situations	____	____	____	____
I eat only 1 serving per meal	____	____	____	____
I use problem solving	____	____	____	____
I am working on changing negative thoughts to positive thoughts	____	____	____	____
I use the Food Guide Pyramid to guide my food choices	____	____	____	____

Other Strategies_____

What technique(s) do you think are working best for you?_____

Session 12 - Lesson 20

_____1. This lesson suggests that patients evaluate their progress in the program in preparation for the maintenance phase.

_____2. Tell patients to write a statement about their progress, their feelings about their weight, and their short and long term goals for weight loss (the next 3 months).

_____3 Answer any questions. Tell patients to continue following their calorie goal and fat gram goal and to monitor food intake using the Food Guide Pyramid.

_____4. Review the Summary to things to do and Continue to do lists.

_____5. Schedule the post-treatment assessment.

The posttreatment assessment should be scheduled within 7 days of the last session. Weight is the central outcome data in this study and I don't

want to miss this data. Therefore, if **all** else fails and the patient can't get to Shands whether it be due to illness or a broken car, have a spouse or family member weigh the patient at home and give you the patient's weight over the phone. Mail the patient the Food Frequency Questionnaire and 3-day food diary with a stamped envelope enclosed so that he/she can return these when he/she completes them).

_____6. Congratulate patients for finishing.

■■IMPORTANT: Use the following list to identify what techniques the patient is presently using to lose weight. Review this list in a check list-fashion, asking about each technique and checking the appropriate column.

	Daily 7/week	Freq. 4-6/week	Often 1-3/week	Never 0/week
Recording food intake	____	____	____	____
Calculating calorie intake	____	____	____	____
Monitoring fat intake	____	____	____	____
Following the calorie goal	____	____	____	____
Limiting number of meals	____	____	____	____
Scheduling meals	____	____	____	____
Limiting uncontrolled eating	____	____	____	____
Using inhibitors	____	____	____	____
Made a Food Area	____	____	____	____
Stopped Noneating in Food Area	____	____	____	____
Pure Experience	____	____	____	____
Chaining	____	____	____	____
Time-out	____	____	____	____
Daily rewards	____	____	____	____
Weekly Rewards	____	____	____	____
Preplanning on hectic days	____	____	____	____
Making food less visible	____	____	____	____
Wrap food in aluminum foil	____	____	____	____
Put food in inaccessible places	____	____	____	____
Bought foods that required preparation	____	____	____	____
Grocery shop on a full stomach	____	____	____	____
Buy less junk food	____	____	____	____
Pause briefly after eat bite	____	____	____	____
I read food labels	____	____	____	____
I preplan on holidays	____	____	____	____
I am more assertive in food-related situations	____	____	____	____

I eat only 1 serving per meal	____	____	____	____
I use problem solving	____	____	____	____
I am working on changing negative thoughts to positive thoughts	____	____	____	____
I use the Food Guide Pyramid to guide my food choices	____	____	____	____
I use positive imagery	____	____	____	____

Other Strategies_____

What Technique(s) do you think are working best for you? _____

BIOGRAPHICAL SKETCH

Tricia Lynn Park is a 28-year old, single woman who was born and raised in upstate New York in a small, supportive family. From her father, Tricia learned the value of hard work and attention to detail, as well as the importance of respite and relaxation. Through the loving support of her mother, Tricia blossomed spiritually, personally, and morally. During her upbringing, Tricia was an outgoing child who involved herself in numerous activities and organizations (e.g., youth symphony, concert choir, French club, marching band, music ministry, etc.). From these experiences, Tricia developed valuable organizational, time management, and interpersonal skills. As a student, Tricia excelled academically, but not without significant effort and dedication to her studies.

After exploring several potential career options in college, Tricia found in psychology a chance to gratify her humanitarian interests, to learn more about the different facets of human nature, and to excel in a diverse and exciting professional discipline. Through her experiences in graduate school, she has come to appreciate the strengths and limitations of the field of psychology as well as the valuable services mental health professionals have to offer individuals, health care institutions, scientific communities, and society.

As a young professional in health psychology, Tricia strongly believes in a close juxtaposition of medical and psychological disciplines, having observed first hand at

Shands Hospital the value of a team approach in the management of acute/chronic illness and disability. She also supports the generation of new knowledge along with the summation and interpretation of existing findings. At this point, Tricia's feet are softly, yet firmly planted in the field of health psychology, and she hopes to continue growing with the field.

Tricia's plan for the future is to gain more graduate teaching experience. She also aspires to enhance her grant writing skills as well as to continue publishing empirical and scholarly work in peer-reviewed journals. Her next step will be the completion of a post-doctoral clinical position in the Department of Clinical and Health Psychology at Shands Hospital at the University of Florida. In the long run, Tricia hopes to achieve an academic position or a position affiliated with a health science center in which she foresees contributing in meaningful ways to the development of students, patients, and the burgeoning field of health psychology.

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

James R. Rodrigue, Chair
Associate Professor of
Clinical and Health Psychology

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

Michael G. Perri
Professor of Clinical and Health
Psychology

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

Stephen R. Boggs
Associate Professor of
Clinical and Health Psychology

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Gary R. Geffken
Associate Professor of
Clinical and Health Psychology

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

James J. Algina
Professor of Foundations of
Education

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

Laura K. Guyer
Associate Professor of Food
Science and Human Nutrition

This dissertation was submitted to the Graduate Faculty of the College of Health Professions and to the Graduate School and was accepted as partial fulfillment of the requirements for the degree of Doctor of Philosophy.

December, 1998

Dean, College of Health Professions

Dean, Graduate School